

SYLLOGE FUNGORUM

OMNIUM HUCUSQUE COGNITORUM

DIGESSIT

P. A. SACCARDO

VOL. XXII.

Sectio I.

SUPPLEMENTUM UNIVERSALE

Pars IX. - Sect. I.

Pag. 1 ad pag. 822

Ascomycetæ

(editæ usque ad finem anni MCMX)

AUCTORIBUS

P. A. SACCARDO ET ALEX. TROTTER

Neminem latet, Syllogen nostram diagnoseon collectionem ordinatam, non vero [nisi in observatis propriis] opus criticum sistere. Hoc faciant monographi et floristæ et benevole meminerint, quid vere sit Sylloge nostra, ne nobis tribuant errores, qui nostri non sunt.

Syll. Fung. V (1887) in præmonitu.

PATAVII

Die XX Augusti MCMXIII — Sumptibus P. A. SACCARDO
TYPIS SEMINARII

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Pars IX.

Ascomycetæ Deuteromycetæ

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Fol. 101 — Pretium it. lib. (frances) 101

PATAVI

Die XX Augusti MCMXIII — Sumptibus P. A. SACCARDO
TYPIS SEMINARI

SUMMA FUNGORUM HUCUSQUE COGNITORUM

Species in voluminibus I-XVIII descriptæ	57,660
Species in voluminibus XXI et XXII descriptæ	8,955
Species fungorum in toto opere descriptæ	<hr/> 66,615

EGREGIIS VIRIS

CH. B. PLOWRIGHT (1849-1910)

ANGLO

RUD. ADERHOLD (m. 1907), MAX BRITZELMAYR (1838-1909)

JULIO KÜHN (1825-1910), RUD. HESSE (1844-1912)

GUST. HERPELL (m. 1912)

GERMANICIS

FR. X. GILLOT (1842-1910), LEONI MARCHAND (1833-1911)

ED. BORNET (1828-1911), LEONI ROLLAND (1842-1912)

JULIO DE SEYNES (1837-1912), ED. GRIFFON (1869-1912)

L. CRIÉ (m. 1912), JULIANO GODFRIN (m. 1913)

GALLICIS

JULIÆ COM. TURCO-LAZZARI (1848-1912)

ITALICÆ

A. P. MORGAN (1836-1908)

BOREALI-AMERICANO

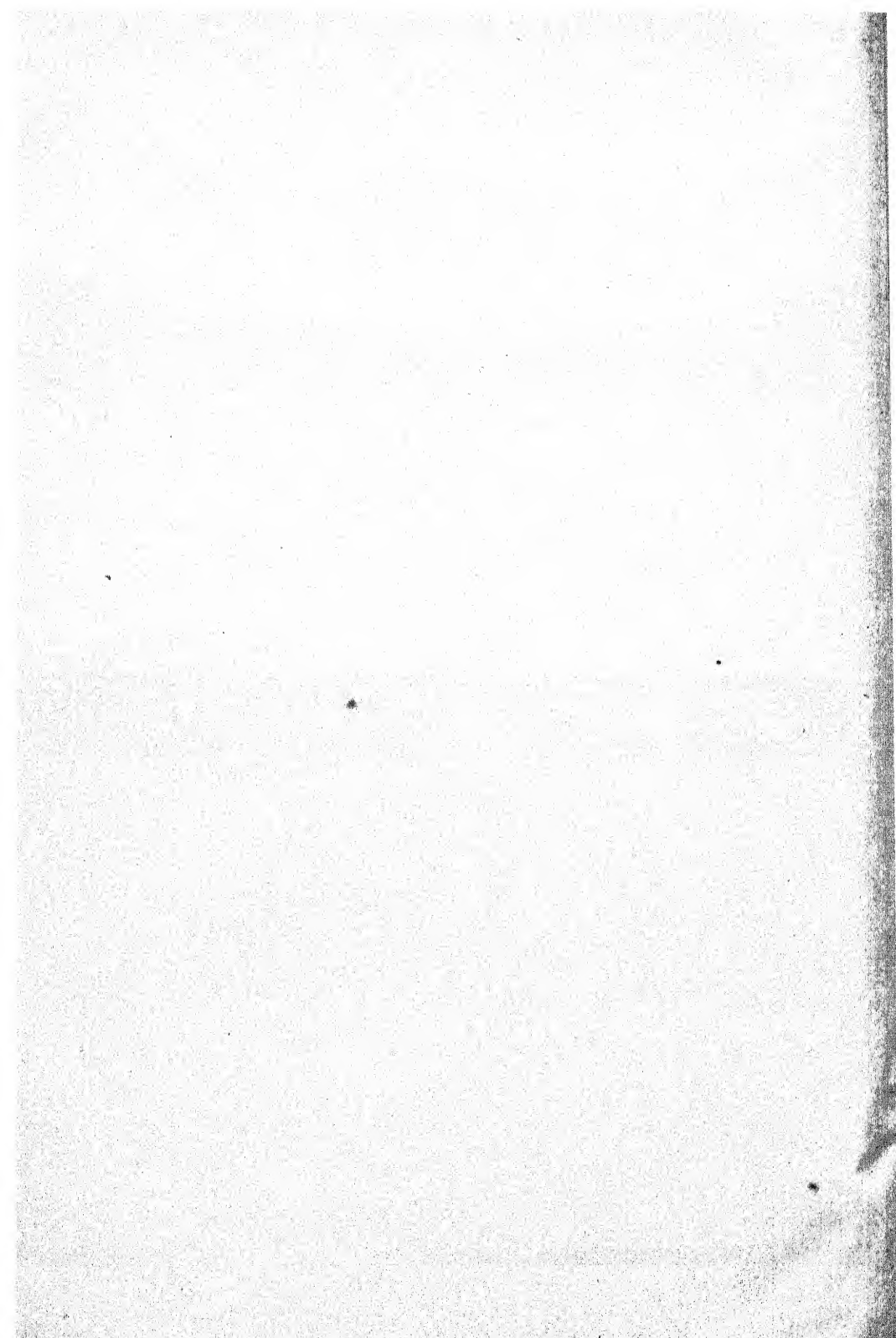
DE SCIENTIA MYCOLOGICA BENEMERENTIBUS

QUINQUENNIO ULTIMO DEMORTUIS

VOLUMEN HOC

DICANT

P. A. SACCARDO ET AL. TROTTER



LABOULBENIOMYCETÆ Peyr. (*)

Syll. VIII p. 909, IX p. 1130, XIV p. 725, XVI p. 674, XVII p. 915.

Conspectus tribuum, subtribuum et generum Laboulbeniomycetum

sec. Thaxt. Monogr. Laboulb. II (1908) p. 236-239.

- 1 Antheridia ex cellulis specialibus v. cellularum aggregationibus specialibus formata. **LABOULBENINÆ 80**
- 2 Antheridia composita; cellulae antheridiales endogenae e cellula una v. pluribus intercalaribus formata et intra et ab communi loculo evacuantia (subinde libera sed compacta in *Distichomycte*). **PEYRITSCHIELLACEÆ 35**
- 4 Individua unisexualia **DIMORPHOMYCETÆ 7**
- 5 Perithecia ex axe primario verticali v. obliquo oriunda. **Dimeromyces 6**
- 6 Perithecia ex uno v. pluribus axibus secundariis cellula subbasali suffultis oriunda. **Dimorphomyces**
- 7 Individua hermaphrodita; appendices steriles 1-cellulares basi atratae. **20**
- 8 Antheridium liberum a receptaculo. **RICKIÆ 11**
- 9 Cellulae antheridiales poro communi evacuentes. **Rickia 10**
- 10 Cellulae antheridiales demum liberae sed aggregatae. **Distichomyces**
- 11 Antheridium receptaculo ex toto v. partim adnatum. **PEYRITSCHIELLEÆ 18**
- 12 Receptaculi cellulae supra cellula basali seriatae.

(*) Ill. prof. THAXTER anno 1908 in lucem protulit mirabilis et magni ponderis monographiæ Laboulbeniacearum partem alteram, cujus eximias icones in Syll. vol. XIX-XX citari curavimus. Hic tantum utilem prospectum generum ex eadem monographia traducimus et tantum brevissimas notas de generibus et speciebus novis referimus. Ofr. Syll. XIV, p. 725.

- 13 Perithecia omnino libera. 16
- 14 Receptaculi series subterminalis antheridia bina ferens. **Dichomyces** 15
- 15 Receptaculi series subterminalis antheridium singulum laterale ferens. **Peyritsiella**
- 16 Perithecia distantiori parti receptaculi adnata.
- 17 Antheridium anterius, ad perithecii basim situm. **Limnæomyces** 18
- 18 Antheridium ad basim appendicum; supra pedicellum adsunt binæ cellulæ superpositæ. **Chitonomyces** 19
- 19 Antheridium ut in n. 18; cellulæ supra pedicellum ternæ. **Hydræomyces**
- 20 Individua hermaphrodita; appendices steriles pluricellularia, ima basi atrata. **ENARTHROMYCETÆ**
- Enarthromyces** 21
- 21 Individua hermaphrodita; appendices steriles absentes v. basi atrata carentes.
- 22 Antheridium evacuans inter cellulas quaternas appendiculatas. **MONOICOMYCETÆ** 25
- 23 Cellulæ antheridiales in 4 paria opposita dispositæ. **Monoicomyces** 24
- 24 Cellulæ antheridiales copiosæ. **Eumonoicomyces**
- 25 Antheridium per porum liberum dehiscens. **HAPLOMYCETÆ**
- 26 Cellulæ antheridiales discretæ a cellulis sterilibus supra cellulam pedicelli appendicis sitis. 29
- 27 Antheridium terminale, rotundatum, areolatum, poro laterali spinaque terminali præditum. **Haplomyces** 28
- 28 Antheridium conicum poro terminali prominenti præditum. **Campomyces**
- 29 Cellulæ antheridiales cum cellulis sterilibus supra cellulam pedicelli appendicis aggregatæ. 30
- 30 Cellulæ antheridiales numerosæ, in oblique superpositas series dispositæ, cum cellula sterili marginali sociatæ, poro apicali. **Eucantharomyces** 31
- 31 Antheridium poro laterali dehiscens infra partem cellulosam terminalem sterilem. **Cleidiomyces** 32
- 32 Cellulæ antheridiales paucæ dehiscentes in loculum supra cellulas binas externas extensum usque ad loculum terminalem et porum. **Euhaplomyces** 33

- 33 Antheridium areolatum, laterale infra steriles ramulos terminales. **Cantharomyces**
- 34 *Incertæ sedis*; cellulæ ascogenicæ copiosissime (vide 46). **Polyascomyces**
- 35 Antheridia ex cellulis singulis, tubulis efferentibus liberis præditis efformata. **LABOULBENIACEÆ**
- 36 Individua unisexualia. 42
- 37 Perithecia receptaculis secundariis hospiti immediate hærentia. **HERPOMYCETÆ**
Herpomyces 38
- 38 Perithecia e receptaculo primario oriunda. **AMORPHOMYCETÆ**
- 39 Receptaculum bicellulare in perithecia desinens; sporidia continua. **Amorphomyces** 40
- 40 Receptaculum in prominentiam bicellularem desinens; sporidia 1-septata. **Dioicomyces** 41
- 41 Receptaculum pluricellulare, chaetophorum (*Incertæ sedis*). **Smeringomyces**
- 42 Individua hermaphrodita; receptaculum primarium processu secundario carens (ex evolutione intercalari). 75
- 43 Receptaculum simplex v. axe libero secundariæ origines carens. 69
- 44 Appendix antheridialis, constans ex singula simplici serie cellularum superpositarum, a ramulis sterilibus v. appendicibus separata. **STIGMATOMYCETÆ** 50
- 45 Cellula subterminalis appendicis sterilis, cellula infra posita antheridia plura gerens, terminalis cellula antheridium unicum spinosum gerens. **Acompsomyces** 46
- 46 Appendix ex cellulis pluribus applanatis irregulariter superpositis constans, apice processu cupuliformi aucta; cellulis ascogenis valde copiosis (*Incertæ sedis* v. n. 34). **Polyascomyces** 47
- 47 Appendix antheridialis quinquecellularis; bina antheridia superposita e cellula terminali et subterminali orientia. **Acallomyces** 48
- 48 Pars distantior fertilis appendicis constans ex duabus v. pluribus cellulis superpositis, quæ exerunt antheridia in seriem singulam v. duplicem disposita. **Stigmatomyces** 49
- 49 Antheridia plus v. minus distincte verticillata in parte terminali fertili appendicis **Arthrorrhynchus**

- 50 Appendices antheridiales v. rami 2-plures cum ramis sterilibus ramulisque sociati.
- 51 Receptaculum, proliferationis ope, extremitate multicellulare, ceteris cellulis copiose appendiculatis. 58
- 52 Appendix primaria cellularum superpositarum ramulos antheridiales extus superpositos exerens; ramuli similes e cellulis unilateraliter orientes ad basim pedicelli perithecialis.

IDIOMYCETÆ**Idiomyces 53**

- 53 Appendices primariæ nullæ matura ætate.
- 54 Receptaculum obconicum, cellulæ proliferæ exerentes extremitate fasciculum densum appendicum, basim pedicelli perithecialis obducentem.
- 55 Rami steriles pauci, cellulæ antheridiales intercalariter in series continuas dispositæ. **TERATOMYCETÆ 57**
- 56 Rami ramulique steriles copiosi, cellulæ antheridiales liberæ, extus in series irregulares superpositæ ad ima appendicum segmenta, cum cellulis sterilibus rostellatis sociatæ. **Symplectomyces 56**

Teratomyces 57

- 57 Receptaculum subtriangulare, applanatum, processibus binis bicellularibus peritheciiisque binis sociatum, cellulæ proliferæ supra basim appendices copiosas ramosas exerentes.

Diplomyces

- 58 Receptaculum e cellulis binis superpositis constans, superior gignens appendicem plus v. minus distinctam primariam nec non unum v. plura perithecia pedicellata. 68
- 59 Rami antheridiales exerentes antheridia serialiter intercalaria.

CORETHROMYCETÆ

- 60 Appendices primariæ hyalinæ e cellula basali ramulos gignent, perithecia secundaria efformata æque ac primaria.

Rhadinomyces 61

- 61 Appendices primariæ plus v. minus atratæ, earum cellula basalis exerens perithecia secundaria (si adsint).

Corethromyces

- 62 Antheridia libera, singula v. aggregata in appendicibus vel earum ramis sita.

LABOULBENIÆ

- 63 Axis primarius appendicum e cellulis binis superpositis constans, superior gerens seriem ramorum e quorum basi oriuntur ramuli antheridia singula v. aggregata proferentes.

Eucorethromyces 64

- 64 Appendix constans e cellulis pluribus superpositis extima ramos steriles gerens, basalis sæpe perithecia gignens, ceteræ ex angulo superiore emittentes ramulos breves antheridiales.

Stichomyces 65

- 65 Appendix constans e cellulis numerosis superpositis, cellula basalis libera sterilis et specialis, ceteræ extus series ramulorum superpositorum gerentes, quorum cellula basalis antheridia singula v. aggregata gignunt.

Rhizomyces 66

- 66 Appendix constans e cellulis superpositis, cellula basalis adnata, sterilis æqualis, ceteræ introrsum appendiculatæ, ramuli antheridia plus v. minus irregulariter proferentes.

Sphaleromyces 67

- 67 Appendix bicellularis, cellula extima atrata proferens ramulos steriles et antheridiales.

Ceraimyces

- 68 Receptaculum multicellulare, ex cellulis subbiseriatis supra cellulam subbasalem sitis constans, altera series in perithecium terminata, altera in appendices.

Laboulbenia

- 69 Receptaculum axes unum v. plures perithecigeros secundarios liberos gerens.

- 70 Axis primarius dimotus a secundario singulo, plus v. minus elongato, multicellulari, chætophoro atque perithecium subterminale gerente.

RHACHOMYCETÆ**Rhachomyces 71**

- 71 Receptaculum constans ex axe biseriato-multicellulari perithecigero, axesque lateraliter similes, quoque perithecigeros proferens.

CLEMATOMYCETÆ**Clematomyces 72**

- 72 Axes perithecigeri unicellulares, extreme appendiculati infra pedicellos peritheciales.

COMPSOMYCETÆ

- 73 Individua solitaria ramis subverticillatis fertilibus et sterilibus, ex receptaculo bicellulari.

Compsomyces 74

- 74 Individua dense fasciculata ex haustorio celluloso communi in hospitem penetrante oriunda.

Moschomyces

- 75 Receptaculum indeterminatum v. divisionis secundariæ cellularum ope prolongatum.

- 76 Appendix primaria constans ex axe definito cellularum superpositarum (cfr. quoque n. 84).

79

- 77 Receptaculum et primaria appendix axem cellularum superpositarum setiformem formantia, ramos, perithecia et ulte-

riores ramulos in seriem unilateralem disposita gignentia.

CHÆTOMYCETÆ

Chætomyces 78

- 78 Receptaculum ob secundarios processus versiforme, ramulos nullos infra perithecia gerens.

ECTEINOMYCETÆ

Ecteinomyces

- 79 Appendix primaria constans ex prominentia subrotunda cellulari prope perithecium, ramulis terminalibus evanescentibus (*incertæ sedis*).

MISGOMYCETÆ

Misgomyces

- 80 Antheridia ex cellulis non v. parum mutatis appendicum v. eorum ramis formata. Species plerumque aquaticæ.

CERATOMYCETINÆ

- 81 Receptaculum contextu multicellulari compacto carens. 90

- 82 Receptaculum infra perithecia nullas appendices gerens.

CERATOMYCETÆ 89

- 83 Receptaculum indeterminatum 86

- 84 Perithecium determinatum paucicellulare Hydrophilomyces 85

- 85 Perithecium indeterminatum pluricellulare.

Rhynchophoromyces

- 86 Receptaculum determinatum. 87

- 87 Perithecium determinatum paucicellulare. Autoicomyces 88

- 88 Perithecium pluricellulare. Ceratomyces

- 89 Receptaculum gerens appendices e cellulis specialibus infra perithecia sitis formatas.

COREOMYCETÆ

Coreomyces

- 90 Receptaculum contextu multicellulari compacto formatum.

ZODIOMYCETÆ

- 91 Receptaculum apice cupulatum, margine ciliato perithecia copiosa amplexante

Zodiomyces 92

- 92 Receptaculum constans ex axe compacto, continuo cum appendice primaria apice appendiculata atque perithecia appendicesque lateraliter dense seriata gerens. Euzodiomyces 93

- 93 Receptaculum constans ex axe compacto, continuo cum appendice primaria apice appendiculata, quæ constat ex numerosis seriebus superpositis, quarum extima lateraliter gerit ramos perithecigeros pluricellulares.

Cainomyces

DIMEROMYCES Thaxt. — Syll. XIV p. 725, XVI p. 674, XVII p. 915.

1. **Dimeromyces minutissimus** Thax., Proceed. of the Am. Acad. 3322 vol. XLI, n. 11 (1905) p. 304, Monogr. Laboulb. II, pag. 242, t. 29, f. 6-9.

Hab. in superficie rhabditis Labiæ minoris, Cambridge Mass. Amer. bor. — Long. totalis usque ad apicem peritheci 50 μ .; appendices longiores 40-50 μ .; perithecia 34 \approx 10.

2. **Dimeromyces Labiæ** Thax., Proceed. of the Am. Acad. vol. XLI, 3323 n. 11 (1905) p. 303, Monogr. Laboulb. II, p. 242, t. 29, f. 1-5.

Hab. in elytris Labiæ minoris, Cambridge Mass. Amer. bor. — Long. tot. ad apicem peritheci 65-75 μ .; perithecia 50-60 \approx 12; sporidia 18 \approx 12.

3. **Dimeromyces falcatus** Paoli, Nuovi Laboulb. parass. di Acar. in 3324 Redia VII (1911) p. 292, t. XII, f. 8-9-9*.

Hab. in Acaro Canestrinia doreicola parasitica in Pentodonte punctato prope Pisas Ital. centr. — Longit. receptaculi usque ad basim peritheci 50-51 μ .; perithecia 17-19 μ . lata; appendix inf. 80-94 μ . long., super. 53-60 (dempta utriusque cellula basali).

4. **Dimeromyces muticus** Paoli, Nuov. Laboulb. parass. di Acari in 3325 Redia VII (1911) p. 293, t. XII, fig. 10.

Hab. in Acaro Canestrinia neglecta parasitica in Scarabæo Centauro in Africa. — Longitudo receptaculi usque ad basim perith. 58-60 μ .; perithecia 80 \approx 28; appendix infer. 80 μ . long., super. 44 μ . long. (dempta utriusque cellula basali).

5. **Dimeromyces mucronatus** Paoli, Nuov. Laboulb. parass. di Acar. 3326 in Redia VII (1911) p. 290, t. XII, f. 6-7.

Hab. in Acaro Canestrinia spectanda parasitica in Dorco bucephalo in ins. Java. — Long. receptaculi usque ad basim peritheci 85 μ .; perithecia 80 \approx 35; appendix inf. 96-100 μ . long., super. 88-96 (dempta utriusque cellula basali).

RICKIA Cavara — Syll. XVI, pag. 689. — Ad hoc genus ducenda est: *Rickia Berlesiana* (Baccarini) Paoli, Nuov. Laboulb. etc. in Redia VII (1911) p. 288, t. XII, f. 5 — *Rhacomyses Berlesianus* Baccarini — Syll. XVII, p. 918.

1. **Rickia javanica** Paoli, Nuov. Laboulb. parass. di Acari in Redia, 3327 VII (1911) p. 285, t. XII, f. 1-2.

Hab. in Acaro Pachylaelape spectabili in ins. Java. —

- Receptacula sine stipite 65 μ . long., sine antheridiis 47 μ . cr.; antheridia 17-18 μ . longa, perithecia (sine trichogyno) 34 μ . longa.
2. **Rickia Coleopterophagi** Paoli, Nuov. Laboulb. parass. di Acari in Redia VII (1911) p. 286. 3328

Hab. in Acaro Coleopterophago procero in India. — Receptacula (sine stipite) 88 μ . long., (sine appendice) 58 μ . lata; stipes 30 μ . long.; antheridia 15-16 μ . longa; perithecia (sine trichogyno) 51 μ . longa.

3. ? **Rickia minuta** Paoli, Nuov. Laboulb. parass. di Acari in Redia VII (1911) p. 287, t. XII, f. 4. 3329

Hab. in Acaris Holocæleno, Pachylælope et ? Megatolælope in Brasilia et Æquatoria. — Receptaculum (sine stipite) 50 μ . long., (sine appendic.) 30 μ . lat.; stipes 39 μ . long.; perithecia (sine trichogyno) 20 μ . longa.

DISTICHOMYCES Thaxter, Proceed. of the Amer. Acad. vol. XLI, n. 11, (1905) p. 308, Monogr., Laboulb. II, p. 248 (Etym. *distichos* et *myces*). — Receptaculum constans e cellula basali et subbasali, superne seriebus binis parallelis cellularum auctum; cellulæ numero variæ, extus ut plurimum aut appendicem sterilem aut antheridium gerentes; series una in perithecium, altera in appendicem primariam desinens. Appendices ad instar *Rickiæ* et *Peyritschiiellæ*. Antheridia maturescentia in ramulo acrogena, demum libera.

1. **Distichomyces Leptochiri** Thaxt. l. c., Monogr. p. 249, t. 71, f. 1-6. 3330
- Characteres generis.

Hab. in capite, antennis et superf. inf. Leptochiri sp. in insula Java. — Long. total. 475 \approx 11, exempl. minor. 125 \approx 36; perithecia 50-55 \approx 15-20; appendices longiores 75 \approx 6; ramulus antheridialis 18 μ . long.

CHITONOMYCES Peyr. — Syll. VIII p. 914, XIV p. 727, XVI p. 678.

1. **Chitonomyces dentifer** Thaxt., Proceed. of the Amer. Acad. v. XLI, n. 11 (1905) p. 306, Monogr. Laboulb. II, p. 264, t. 34, f. 26-27. 3331

Hab. in elytris Laccophili proximi pr. Eustis et Daytona, Florida Amer. bor. — Long. tot. usque ad apicem peritheci 90-110 \approx 18-20; perithecia 65 \approx 18; pars basalis receptaculi 35 μ .; sporidia 28 \approx 3.

2. **Chitonomyces spinosus** Thaxt., Proc. Amer. Ac. Arts a. Sc. XLI, 3332 (1905) p. 808, Monogr. Laboulb. II, p. 265, t. 62, f. 40.

Hab. in artubus *Laccophili* sp. in insula Java. — Long. totalis ad apicem peritheci incl. pedicello, $130 \approx 33$; appendices marginales 45-60 μ . long.; perithecia $75 \approx 20$; sporidia $28 \approx 2.5$.

3. **Chitonomyces javanicus** Thaxt., Proceed. of the Amer. Acad. 3333 vol. XLI, n. 11 (1905) pag. 307, Monogr. Laboulb. II, pag. 266, t. 42, f. 37-38.

Hab. ad elytra *Laccophili* sp. in insula Java. — Long. totalis ad peritheci apicem 165-185 μ ., ad apicem processus receptaculi 180-200, latit. maxima 22-25 μ .; perithecia 90-110 ≈ 16 ; receptaculi pars basalis 75 μ . long., incluso pedicelo.

MONOICOMYCES Thaxt. — Syll. XI p. 675, XVII p. 915.

1. **Monoicomyces similis** Thaxt., Proceed. of the Amer. Acad. v. XLI, 3334 n. 11 (1905) p. 305, Monogr. Laboulb. II p. 269, t. 35, f. 1-2.

Hab. in abdomine *Homalotæ*, speciem *Lactarii* vexantis, Maine Amer. bor. — Long. total. usque ad apicem peritheci 150-200; perithecia 90-110 ≈ 30 , cellula pedicelli 35-46; sporidia $35 \approx 4$.

2. **Monoicomyces Leptochiri** Thax., Proceed. of the Amer. Acad. 3335 vol. XLI, n. 11 (1905) p. 304, Monogr. Laboulb. II, p. 272, t. 34, fig. 39-40.

Hab. in toto corpore *Leptochiri* unicoloris, *L. javanici* et *L. minuti* in insula Java. — Long. total. ad apicem peritheci 250-300 μ .; axis 18-20 μ . diam.; perithecia 70-90 ≈ 18 -25; appendices longiores 50 μ ..

EUCANTHAROMYCES Thaxt., Syll. XI p. 446, XIV p. 726, XVI p. 676.

1. **Eucantharomyces madagascarensis** Thaxt., Proceed. of the Amer. 3336 Acad. vol. XLI, n. 11 (1905) p. 306, Monogr. Laboulb. II, p. 278, t. 38, f. 24-26.

Hab. in elytris *Callidæ*, Madagascar. — Perithecia, inclusa cellula basali, $385 \approx 60$ -70; cellula pedicelli 275-290 ≈ 40 -45; receptaculum 165 ≈ 35 -45; antheridia 130-150 ≈ 30 -35, cellula basali 75 μ . long.; sporidia $60 \approx 4$.

CLEIDIOMYCES Thaxt., Monogr. Laboulb. II (1908) p. 281 (Etym. *kleidion* clavicula), *Monoicomyces* Thaxt. p. p. olim et in Syll. — Receptaculum constans e binis cellulis superpositis; cellula basalis typice processus duo peculiare exerens, subbasalis appendices an-

theridiales et perithecia proferens. Appendix constans e cellula stipitis binisque cellulis superpositis cum quibus antheridium minutum compositum est sociatum, appendix desinens in extremitatem liberam cellularem supra antheridium. Perithecium stipitatum illo *Monoicomycetis* simile. — Ad hoc genus spectat:

1. *Cleidiomyces furcillatus* Thaxt. l. c. p. 281, t. 37, f. 3-4. Cfr. 3337 Syll. XVI p. 675.

HERPOMYCES Thaxt. — Syll. XVII p. 915.

1. *Herpomyces Platyzosteriæ* Thaxt., Proceed. of the Amer. Acad. 3338 vol. XLI, n. 11 (1905) p. 310, Monogr. Laboulb. II, pag. 286, t. 39, f. 3-4.

Hab. in antennis *Platyzosteriæ* ingentis, Mexico. — Mas: long. totalis usque ad apicem antheridii 40 μ . Femina: long. tot. usque ad apicem processus subterminalis 160-225 μ .; perithecia 150 \approx 33; ejus processus terminalis 10 \approx 3,5.

2. *Herpomyces Phyllodromiæ* Thaxt., Proceed. of the Amer. Acad. 3339 vol. XLI, n. 11 (1905) p. 310, Monogr. Laboulb. II, pag. 288, t. 39, f. 1-2.

Hab. in antennis *Phyllodromiæ* in Abyssinia. — Mas: long. total. 30 μ . Femina: receptaculum primarium 25 μ . long., secundarium 20 \approx 10; perith. usque ad apicem processus 80-100 \approx 15-20.

3. *Herpomyces Anaplectæ* Thaxt., Proceed. of the Amer. Acad. 3340 vol. XLI, n. 11 (1905) p. 309, Monogr. Laboulb. II, pag. 289, t. XXXIX, f. 9-10.

Hab. in antennis *Anaplectæ* spec. A. Dohrinanæ affinis pr. Caracas Venezuelæ (BLAKESLEE). — Mas: long. total. incl. antheridio 32-50 μ .; antheridia 24 \approx 2. Femina: receptaculum primarium 25 \approx 3, secundarium 16 \approx 13; perithecia 80-90 \approx 16; sporidia 18 \approx 2.

4. *Herpomyces Nyctoboræ* Thaxt., Proceed. of the Amer. Acad. v. XLI, 3341 n. 11 (1905) p. 309, Monogr. Laboulb. p. 292, t. 39, f. 5-8.

Hab. in antennis *Nyctoboræ* latipennis, Texas Amer. bor. — Mas: axis 54 \approx 10; long. total. usque ad apicem antheridii 100 μ .; antheridia 20 \approx 3. Femina: receptaculum secundarium 65 \approx 45-50; basis et cellula pedicelli perithecii 30-35 \approx 15-18, pars ascigera usque ad apicem spinæ 150-165 \approx 20-25; spina externa 50 μ ., terminalis 12 μ . long.

SMERINGOMYCES Thaxt. Monogr. Laboulb. II (1908) p. 296 (Etym. *smerinx*, *smeringos* funiculus), *Rhacomyses* Thaxt. p. p. olim et in Syll. — Individua? mascula setiformia e multis cellulis superpositis. Individua? feminea: receptaculum constans ex 3-4 cellulis superpositis, perithecium unicum apice gerentibus; cellula subbasali appendice setiformi suffulta, cellula superior in similem apicem desinens. Perithecium appendiculatum, cavitas ejus cum cellula stipitis continua. — Ad hoc genus spectat:

1. *Smeringomyces anomalus* Thaxt. l. c. p. 297, t. 42, f. 41-42. 3342

ACOMPSOMYCES Thaxt. — Syll. XVI p. 692, XVII p. 917.

1. *Acompsomyces brunneolus* Thaxter, Proceed. Amer. Ac. Arts a. 3342*
Sc. XLI (1905) p. 311, Monogr. Lab. II, p. 298, t. 62, f. 10-12.
Hab. in elytris Corticariæ, Maine Amer. bor. — Long. tot. 125 μ .; perithecia 80 \approx 20; cellula stipitis 12 \approx 10; receptaculum 28 \approx 12; appendices usque ad spinæ apicem 45 \approx 10, cellula basalis 10 μ . longa.

STIGMATOMYCES H. Karst. — Syll. VIII p. 912, XIV p. 729, XVI p. 680.

1. *Stigmatomyces Venezuelæ* Thaxt., Proceed. of the Amer. Acad. 3343
vol. XLI, n. 11 (1905) p. 314, Monogr. Laboulb. II, pag. 304, t. 49, f. 20-21.

Hab. in abdomine Limosinæ in ins. Margarita Venezuelæ (BLAKESLEE). — Perithecia 95 \approx 30; receptaculum 90 \approx 14; appendices 45 μ . long., cellula pedicelli 22 μ . longa.

2. *Stigmatomyces pauperculus* Thaxt., Proceed. of the Amer. Acad. 3344
vol. XLI, n. 11 (1905) p. 313, Monogr. Laboulb. II, p. 306, t. 49, f. 18-19.

Hab. in artubus Muscæ sp. cujusdam, Ralum, Nova Pomerania Oceaniæ. — Long. tot. usque ad apicem perithecii 165-175 μ .; perithecium 40-45 \approx 35-38, rostellum 50 \approx 16; appendices, inclusa cell. basali, 58-65 \approx 15; sporidia 32 \approx 3.

3. *Stigmatomyces micrandrus* Thaxt., Proceed. of the Amer. Acad. 3345
vol. XLI, n. 11 (1905) p. 312, Monogr. Laboulb. II, pag. 306, t. 47, f. 19-24.

Hab. in abdomine Muscæ cujusdam, Ralum, Nova Pomerania Oceaniæ. — Long. total. 275-325 μ .; receptaculum 90-110 \approx 90; perithecium 72-80 \approx 50-60, rostellum 140-150 \approx 16-18; appendices 35-40 μ . long., cellula pedicelli 20 μ . long.; sporidia 45 \approx 4.

4. **Stigmatomyces Elachipteræ** Thaxt., Proceed. of the Amer. Acad. 3346
vol. XLI, n. 11 (1905) p. 311, Monogr. Laboulb. II, p. 308, t. 46,
f. 5-10.

Hab. in *Elachiptera longula*, New Hampshire Amer.
bor. — Perithecia 55-65 \times 30, rostellum 50 \times 16-20 appendices
80-90 μ . long., cellula stipitis 15-20 μ . long.; receptaculum 65 \times
18; sporidia 40 \times 3,5.

5. **Stigmatomyces Sarcophagæ** Thaxt., Proceed. of the Amer. Acad. 3347
vol. XLI, n. 11 (1905) p. 313, Monogr. Laboulb. II, p. 309, t. 49,
f. 14-17.

Hab. in abdomine *Sarcophagæ* sp. in ins. Margarita Vene-
zuelæ (BLAKESLEE). — Long. total. 600 μ .; receptaculum 200-
325 \times 30; perithecia 75-90 \times 35-42, ejus rostrum 150 \times 18-22; ap-
pendices usque ad curvaturam 110 μ . long.; cellula pedicelli 35
 μ . longa, cell. basalis 18-20 μ .; sporidia 35 \times 4.

SYMPLECTROMYCES Thaxt. Monogr. Laboulb. II (1908) p. 314 (Etym.
syn simul, *plectron* calcar), *Teratomyces* Thaxt. p. p. olim et in
Syll. — Receptaculum constans ex 3-4 cellulis superpositis, ex-
tima irregulariter prolifera; proliferationes orientes e cellulis nu-
merosis appendiculatis v. ramis brevibus appendiculatis, qui basim
perithecii plus v. minus complete amplectuntur. Appendices fer-
tiles v. steriles, postremæ simplices, cylindricæ sæpe in cellulam
rostratam desinentes; fertiles constantes e multis cellulis super-
positis e quibus pleræque ut antheridia funguntur, brevi processu
dentiformi dehiscentia. — Ad hoc genus spectat:

1. **Symplectromyces vulgaris** Thaxt. l. c., p. 315, t. 50, f. 14-16. 3348

LABOULBENIA Mont. et Rob. — Syll. VIII p. 909, IX p. 1132, XI
p. 450, XIV p. 730, XVI p. 682, XVII p. 918.

1. **Laboulbenia atlantica** Thaxt., Monogr. Laboulb. II (1908) p. 336, 3349
t. LII, f. 16-17.

Hab. in elytris *Lathrobii* multipunctati et *Gargi*
Schaumii in insula Madera. — Receptaculum 110 μ .; maxima
lat. 58 μ .; appendices longiores 380 μ .; perithecia 90 \times 70.

2. **Laboulbenia bilabiata** Thaxt., Proceed. of the Amer. Acad. v. XLI, 3350
n. 11 (1905) p. 315, Monogr. Laboulb. II, p. 352, t. 55, f. 9.

Hab. in *Brachino* armigero in Capite Bonæ Spei Afr. —
Long. tot. 450 \times 115, appendices 200-300 μ . long.; receptaculum

225-250; perithecia 240×75 , incluso processu terminali, qui 25×22 metitur.

3. *Laboulbenia Rougetii* Rob. et Mont. — Syll. VIII, p. 910, XIV, 3351 p. 734. — var. *japanensis* Thaxt., Monogr. Laboulb. II, p. 352, t. 55, f. 7.

Hab. in *Brachini* sp. in Japonia. — Longit. tot. usque ad apicem perithecii 700 μ . A typo præcipue distincta var. appendicibus obtusis, extus curvatis, brevioribus etc. — var. *sinensis* Thaxt., l. c. pag. 352, t. 55, f. 8. — In *Brachino sinensi*, China. — Long. tot. usque ad apicem perithecii 450 μ .; appendices pluries divisæ, divaricatæ, usque ad 450 μ . longæ.

4. *Laboulbenia olivacea* Thaxt., Proceed. of the Amer. Acad. v. XLI, 3352 n. 11, 1905, p. 315, Monogr. Laboulb. II, p. 360, t. 55, f. 3.

Hab. in artubus et abdomine *Lebiæ* sp. in insula Java. — Long. tot. usque ad apicem perithecii $185-220 \times 40-48$; perithecia $80-100 \times 32-40$; receptaculum 90 μ . long.; appendices $75-110 \mu$. long.

5. *Laboulbenia pusilla* Thaxt., Proceed. of the Amer. Acad. v. XLI, 3353 n. 11 (1905) p. 316, Monogr., Laboulb. II, p. 365, t. 65, f. 6.

Hab. in parte inferiore *Brachini scotomedis* in Japonia. — Long. totalis usque ad apicem perithecii $200-210 \mu$.; appendices $100-110 \mu$. long.; receptaculum $100-110 \mu$. long.; perithecia $90 \times 36-40$; sporidia 45×5 .

6. *Laboulbenia Lebiæ* Thaxt., Monogr. Laboulb. II, p. 371, t. 61, 3354 f. 3-4.

Hab. in artubus *Lebiæ* sp. in insula Java. — Perithecia 165×50 ; appendices longiores 125 μ .; receptaculum 300×60 ; longit. totalis 500 μ .

7. *Laboulbenia subpunctata* Thaxt., Monogr. Laboulb. II, p. 394, t. 64, 3355 f. 5-6.

Hab. in prothorace et capite *Galeritæ* spp. Argentina, Brasilia; in *Galerita carbonaria* et *G. unicolore* in Amazonia Bras. — Long. tot. usque ad apicem perithecii $400-450 \mu$.; maxima lat. 70 μ .; perithecia, incluso pedicello, 200×40 ; appendices $125-150 \mu$. long., rami longiores 120 μ .; sporidia 44×5 .

8. *Laboulbenia bicolor* Thaxt., Monogr. Laboulb. II, p. 398, t. 62, 3356 f. 13-15.

Hab. in artubus *Galeritæ* spec. Venezuela et (forma major) *Galeritæ carbonariæ* in Brasilia. — Long. tot. usque ad apicem perithecii $275-300$; receptaculum $100-125 \times 35-40$; periperithecia sine pedicello $125-150 \times 18-32$; appendices $125-150$;

sporidia $50 \approx 5$. In forma majore dimensiones circ. quarta parte majores.

9. *Laboulbenia Ozenæ* Thaxt., Monogr. Laboulb. II, p. 403, t. 63, 3357 f. 11.

Hab. in *Ozæna angulicolli*, Venezuela. — Long. tot. usque ad apicem peritheci 220, maxima lat. 60 μ .; receptaculum 150 μ . long.; perithecia 90-100 \approx 30-33; sporidia $55 \approx 5$; antheridia 36 μ . long.

10. *Laboulbenia texana* Thaxt., Monogr. Laboulb. II, p. 404. — Syll. 3358 XI, p. 453, XIV p. 734. — var. *oaxacana* Thaxt., l. c. p. 405, t. 63, f. 7.

Hab. in prothorace *Brachini lateralis*, Oaxaca Mexici. — Long. tot. 550 μ .; perithecia 200 \approx 85; appendices 400 μ . long.; receptaculum 470 μ .; sporidia $60 \approx 5$. — var. *refusa* Thaxt. l. c. p. 406, t. 63, f. 6. — In prothorace et artubus *Brachini* sp. in Florida et Argentina. — Tot. longit. usque ad apicem peritheci 200-300 μ .; receptaculum 275-360 μ . long.; appendices 180-280 μ . long.; perithecia 150 \approx 60; sporidia $70 \approx 5,5$.

11. *Laboulbenia pallescens* Thaxt., Proceed. of the Amer. Acad. 3359 vol. XLI, n. 11 (1905) p. 318, Monogr. Laboulb. II, p. 407, t. 61, f. 9-10. — Ita vocanda *Lab. pallida* Thaxt. (1902). — Syll. XVI, p. 687, non Thaxt. (1899) — Syll. XVII, p. 922.

12. *Laboulbenia chætophora* Thaxt., Proceed. of the Amer. Acad. 3360 vol. XLI, n. 11 (1905) p. 317, Monogr. Laboulb. II, pag. 412, t. 67, f. 19.

Hab. in abdomine *Dineutis solitarii*, Madagascar? et *Gyrini* sp. in America boreali. — Long. total. usque ad apicem peritheci 800 \approx 185; receptaculum 525 μ . long.; perithecia 380 \approx 10, spinulæ longiores 40 μ .

13. *Laboulbenia rotundata* Thaxt., Proceed. of the Amer. Acad. v. XLI, 3361 n. 11 (1905) p. 317, Monogr. Laboulb. II, p. 418, t. 41, f. 16.

Hab. in corpore *Dineutis spinosi* in insula Java. — Tot. long. usque ad apicem peritheci 450 μ . long.; receptaculum 360 μ . long.; perithecia 185 \approx 65, exclusa cellula marginali quæ 18 μ . lata.

14. *Laboulbenia chilensis* Speg., Fungi Chilenses (1910) p. 133 cum 3362 icon. — Tota fumoso-olivascens 150-200 μ . alta; cellulis 7 receptaculi normalibus; perithecio ellipsoideo erecto, ostiolo umbonato normali nigro collariato ornato; cellulis apicalibus distantioribus nigris, paraphysi unica crassa perithecio paullo longiore; ramulo antheridiali brevi, antheridiis duobus ornato.

Hab. in elytris *Bembidii*, Quinta Normal de Santiago Chile Amer. austr.

15. *Laboulbenia sigmoidea* Speg., *Fungi Chilenses* (1910) p. 134, cum 3363
 icon. — Tota subhyalina v. pallide mellea, sigmoidea 300-500 μ .
 alta; cellulis 5 receptaculi normalibus, sexta et septima minimis;
 perithecio subhorizontali, dorsi parte distantiori subhemisphærica
 gibbose adnata, ostiolo subnormali nigro-torquato seu anulo nigro;
 paraphysibus 1 v. 2 crassis simplicibus v. bifidis; ramulo anthe-
 ridifero brevi sæpius mox evanescente, antheridiis 4 ornato.

Hab. in prothorace *Argutoridii*, Quinta Normal de Santiago de Chile America austr.

16. *Laboulbenia marina* Picard, C. R. Soc. Biol. Paris LXV (1908) 3364
 pag. 484, 2 fig. — Tota pallide flava, 150 μ . longa; receptaculo
 cylindræo tricellulari, basi cellula minuta nigra pedicellari aucto,
 sursum ramulum lateralem brevem appendiciferum, nec non pe-
 rithecium singulum exerente; appendicibus, cellula nigra depressa
 fultis, suboctonis, 3-4-cellularibus, fasciculatis, 30-38 μ . longis;
 perithecio fusideo-conico, 76 μ . longo, diaphano, sublibero; spo-
 ridiis fusoides, 26 μ . long., bicellularibus, cellula inferiore multo
 minore subtriangulari vix 4-5 μ . longa.

Hab. in elytris et pilis *Æpodis Robini* (insecti carabidei)
 in rimis saxorum graniticorum ab ab alga *Laminaria obductorum*
 in insula Tatihon in Gallia.

RHACHOMYCES Thaxt. — Syll. XI, p. 454, XIV p. 735, XVI p. 690,
 XVII p. 917.

1. *Rhachomyces Aphænopsis* Thaxt., *Proceed. of the Amer. Acad.* 3365
 vol. XLI, n. 11 (1905, p. 314, Monogr. Laboulb. p. 322, t. 45,
 f. 12-14.

Hab. in elytris *Aphænopsis cerberi*, Ariège Galliae. —
 Receptaculum 75-165 \times 15-18; perithecium (non perfecte matu-
 rum) 85 \times 25; appendices longiores 300-350 μ .

2. *Rhachomyces javanicus* Thaxt., *Proceed. of the Amer. Acad.* 3366
 vol. XLI, n. 11, (1905) p. 314, Monogr. Laboulb. II, pag. 426,
 t. 45, f. 1-2.

Hab. in artubus minuti *Coleopteri* (*Harpaloidei*?), Buiten-
 zorg ins. Javæ. — Long. total. 350-460 μ .; receptaculum 275-
 350 \times 18; perithecia 95-110 \times 35-40; appendices longiores 90-100 μ .

HYDROPHILOMYCES Thaxt., Monogr. Laboulb. II (1908) pag. 431 (Etym. *hydor* aqua et *philos* amicus), *Ceratomyces* Thaxt. p. p. olim et in Syll. XVI, p. 693. — Receptaculum constans e serie indeterminata cellularum superpositarum; cellule divisionis intercalaris et subinde quoque longitudinalis ope indefinite multiplicatæ. Axis appendicum illi receptaculi similis et cum eo continuus, exerens binas series ramorum e cellulis minutis oriundorum, e quibus cellulis inferiores in cellulas antheridiales cuspidatas mutantur. Perithecia e cellulis determinatis, paucis constantia. — Ad hoc genus spectant:

1. *Hydrophilomyces rhynchophorus* Thaxt., l. c. t. 68, f. 1-4. 3367
2. *Hydrophilomyces reflexus* Thaxt., l. c. p. 432, t. 69, f. 3. 3368

RHYNCHOPHOROMYCES Thaxt., Monogr. Laboulb. II (1908) p. 432 (Etym. *rhynchos* rostrum et *phoreo* fero), *Ceratomyces* Thaxt., p. p. olim et Syll. XVI, p. 694. — Receptaculum indeterminatum, constans e plurimis cellulis superpositis apice in perithecium desinentibus. Perithecium ventre et collo distinctis præditum, contentu indefinite multiscellulari. Appendicis basis a ventre non distincta. Antherozoidia apice et lateraliter protrusa plerumque e cellulis ramulorum et appendicis. — Ad hoc genus spectant:

1. *Rhynchophoromyces elephantinus* Thaxt., l. c. p. 433, t. 68, f. 5. 3369
2. *Rhynchophoromyces denticulatus* Thaxt., l. c. p. 432, t. 70, f. 1. 3370

AUTOICOMYCES Thaxt., Monogr. Laboulb. II, p. 434 (1908) (Etym. *autos* idem, *oicia* domus et *myces*), *Ceratomyces* Thaxt. p. p. — Receptaculum e cellulis tribus superpositis constans; ima cellula sæpe in pedicellum atratum abiens, supera cellulas binas gerens, quarum altera perithecium singulum, altera appendicem antheridiale gerit; appendix antheridialis constans e cellulis seriatis extus irregulariter ramigeris. — Huc spectant *Autoic. acuminatus* Thaxt. l. c., *Autoic. ornithocephalus* Thaxt. l. c. jam. ad *Ceratomycetem* relati. Cfr. Syll. XVI, p. 693.

1. *Autoicomycetes falcifer* Thaxt. Monogr. Laboulb. II, p. 435, t. 71, 3371 f. 18, *Ceratomyces falcifer* Thaxt., Proceed. of the Amer. Acad. vol. XLI, n. 11 (1905) p. 318. — Charact. generis.

Hab. in abdomine *Berosi* sp. in ins. Java. — Long. tot. usque ad apicem peritheci 250 μ .; perithecium 125-150 \approx 55-65, appen-

dices 435-470 \approx 22; receptaculum 90-110 \approx 35, append. 110-125 μ . long.; sporidia 55 \approx 4.

CERATOMYCES Thaxt. — Syll. XI p. 455, XIV p. 736, XVI p. 693.

1. *Ceratomyces ansatus* Thaxt., Monogr. Laboulb. II, p. 439, t. 69, 3372 f. 4-5.

Hab. in *Tropisterni* sp. in Brasilia et *Trop. striolato* in Florida. — Long. totalis ad apicem peritheci 425-475 μ .; perithecia 325-350 \approx 75-80, appendices 220 \approx 36; receptaculum ad apicem processuum, incluso pediculo, 175-200 μ . long.

COREOMYCES Thaxt. — Syll. XVII p. 924.

1. *Coreomyces curvatus* Thaxt. Proceed. of the Amer. Acad. v. XLI, 3373 n. 11 (1905) p. 318, Monogr. Laboulb. II, p. 443, t. 71, f. 7-15.

Hab. in elytris *Corisiæ* sp. pr. Cambridge Mass. Amer. bor. — Long. total. 350-360 μ .; perithecia 130-140 \approx 36; cellula stipitis 70 \approx 25; appendices 125 μ . long.; sporidia 55 \approx 4.

TRENAMEYCES Chatton et Picard, Bull. Soc. Entom. Fr. XXV (1909) p. 155 (Etym. *treno*, vox corrupta a *traho* et *myces*). — Dioicus; individua utriusque sexus linearia quadricellularia; cellulae basales, subbasales et duæ terminales steriles; organa reproductionis e cellula subbasali oriunda et supra cellulam basalem plus minusve inflatam inserta, in series lineares radiantes disposita; juvenilia ab axe distantiora. Antheridia composita ex una cellula pediculari et super hanc ex stratis binis cellularum intermediarum et antheridialium, postremis per collum evacuantibus. Perithecia juvenilia trichogynum laterale, subapicale gerentia; perithecia fecundata ex cellula ascogena unica, ascos biseriales alternos tetrasporos ferente, formata. Sporidia biseptata.

1. *Trenomyces histophorus* Chatt. et Pic., Bull. Soc. Entom. Fr. 3374 XXX (1909) pag. 156 cum icon. et tab. VII, Trinchieri in Boll. Soc. Nat. Napoli, vol. 24 (1910) p. 1-7, extr. — Characteres generis; totus fungus achrous; cellula basali sphaerica ampla matricem perforante et deorsum in bulbum bulbillos quaternos ferentem inflata; cellula subbasali abortiva cellulis terminalibus sterilibus ciboriiformibus apice acuminatis, appendicibus sterilibus; antheridiis pedunculatis amphoriformibus ex cellulis quatuor intermediis et septem antheridialibus formatis; peritheciis junioribus

2

Syll. fung. XXII (V-1912)

initio clavatis demum elongato-fusoideis per collum papillis quaternis cinctum dehiscentibus; sporidiis lanceolatis biseptatis, cellula altera majore et altera minore insertioni apta.

Hab. in corpore Pediculorum Mallophagorum, Menopi et Goniocotis abdominalis, Banyuls-sur-Mer Gallie et Menopi pallidi, Neapoli (E. ARMENANTE).

PYRENOMYCETÆ Fr. em.

Syll. I p. 1, IX p. 364, XI p. 252, XIV p. 462, XVI p. 398, XVII p. 524.

Fam. 1. Perisporiaceæ Fr. (*)

Trib. 1. Erysipheæ Lév.

SPHÆROTHECA Lév. — Syll. I p. 3, IX p. 364, XIV p. 462, XVI p. 402, XVII p. 524.

1. **Sphærotheca spiralis** Neger, Centralbl. f. Bakter. etc. II, Abt. 3375 XX (1907) p. 93. — Mycelio et conidiis albis in foliis et ramis evolutis; peritheciis plerumque cauliculis, globosis, 75 μ . c. cr., atro-brunneis; appendicibus albis spiraliter contortis, simplicibus, continuis; ascis solitariis, globosis, 60 μ . c. diam.; sporidiis 8 in quoque asco, ellipsoideis, hyalinis, 17-20 μ . long.

Hab. in foliis caulibusque Escalloniæ rubræ prope Lago argentino ad marginem fageti, Patagonia, Argentina Americæ austr. (P. DUSÉN).

2. **Sphærotheca mors-uvæ** (Schw.) Berk. Syll. I, p. 5. — var. **japonica** Salm., Ann. Mycol. VI (1908) p. 2. — A typo differt peritheciis et ascis minoribus, nempe primis 68-85 μ . diam., postremis 55-70 μ 38-45.

Hab. in caule foliisque Stephanandræ flexuosæ, Morioka Japoniæ (K. OKAMURA).

3. **Sphærotheca Castagnei** Lév. — Syll. I, p. 4. — forma **Alchemillæ** 3377 Stein, Centralbl. f. Bakter. etc. II Abt., XXI (1908) p. 733. — Characteribus præcipue biologicis distincta.

Hab. in Alchemillarum sp. diversis in Helvetia. Teste cl.

(*) Cfr. F. Theissen, *Perisporiales riograndenses*. S. Fiel (in Broteria IX, 1910) aliæque recentiores commentationes et quoad biologiam Erysiphearum cfr. G. M. Reed, *Infection experiments with Erysiphe Cichoracearum* etc. Madison 1908 et *The Mildews of Cereals*. Columbia Mo, 1909.

Stein l. c. species ob notas biologicas etiam in alias formas dividenda. — forma **Euphorbiæ-dulcis** Ferraris, Ann. R. Ist. bot. Roma IX, fasc. 3 (1902) pag. 216: a typo differt mycelio nunc anulos brunneos perithecia limitantes efformante, nunc maculas brunneo-tomentosus sistente. — In foliis caulibusque Euphorbiæ dulcis, Oropa in Pedemontio Italiæ bor. (CESATI).

4. **Sphærotheca fuliginea** (Schlecht.) Pollacci, Erysiph. ital. in Atti 3378 R. Ist. Bot. Pavia ser. II, v. IX (1905) p. 8 (extr.). — Ita vocanda *Sphærotheca Humuli* var. *fuliginea* (Schl.) Salmon Monogr. Erys. p. 49, seu *Sph. dentosa* Kicks — Syll. I, p. 4.

CYSTOTHECA B. et C. — Syll. I p. 72, XVI p. 407. — De hoc genere cfr. Saccardo in Ann. mycol. (1911) p. 250, ubi contendimus genus hoc ob endothecium ex integro a perithecio secedens et cum asco se liberans, distinguendum esse a *Sphærotheca*.

1. **Cystotheca lanestris** (Harkn.) Sacc. in Ann. mycol. l. c. — Ita 3379 vocanda *Sphærotheca lanestris* Harkn. — Syll. IX, p. 364.

PHYLLACTINIA Lév. — Syll. I p. 5, IX p. 366, XVI p. 398, XVII p. 524.

1. **Phyllactinia suffulta** (Reb.) Sacc. — Syll. I, p. 5. — var. **angulata** 3380 Salmon, Ann. Myc. v. III (1905) p. 500, tab. XIV, fig. 1-15. — A typo differt conidio crasso ambitu plus minusve angulari nunc subquadrato- vel oblongo-rectangulari, nunc rectangulari-cylindrico, sæpe medio constricto, uno apice v. utrinque rotundato v. truncato vel obtuse apiculato, 45-60 \times 15-26 raro ad 85 μ . longo.

Hab. in foliis vivis *Quercus Kelloggii*, *Q. macrocarpæ*, *Q. aquaticæ*, *Q. coccineæ*, *Q. discoloris*, *Q. palustris*, *Q. rubræ*, *Castaneæ sativæ*, *Fagi ferrugineæ*, et *Ulmi alatæ*, in Americæ bor. pluribus locis, in foliis vivis *Adesmiæ* sp. in Argentina (SPEGAZZINI), in foliis vivis *Hippophaës rhamnoidis* in Europa. — Var. **rigida** Salmon, l. c. p. 500, tab. XV, fig. 2: a typo differt conidiophoro rigido elongato setiformi ad 500 μ . longo, circ. 5 μ . lato, fere ad apicem parietibus incrassatis. — In foliis in Mexico (FARLOW) et Guatimala (SEEMAN). — Var. **subspiralis** Salmon, l. c. p. 501, tab. XV, fig. 3: a typo differt conidiophoro in parte inferiore subspirali. — In foliis vivis *Dalbergiæ Sissoo*, Poona Indiæ orient. (G. MARSHALL WOODROW) et Dehra Dun (E. J. BUTLER).

UNCINULA Lév. — Syll. I p. 6, IX p. 366, XI p. 252, XIV p. 462, XVI p. 399, XVII p. 524.

1. **Uncinula simulans** Salm., Ann. Mycol. VI (1908) pag. 2. — Am- 3331
phigena; mycelio fugaci; peritheciis sparsis, globoso-depressis, 90-120 μ . diam.; appendicibus 15-30, peritheci diametrum paullo v. duplo superantibus, plerumque v. in eodem perithecio inæqualibus, gracilibus, basim versus c. 5 μ . cr. sursum tenuatis, continuis, ad apicem rubro-fuscis simpliciter uncinatis; ascis oblongo-ovoideis, breviter pedicellatis, 60-70 \times 35-45; sporidiis oblongis 4-6, maturitate granulato-obscuris, 18-20 \times 10-12.

Hab. in foliis Rosæ multifloræ, Morioka Japoniæ (K. OKUMURA). — Species formosa appendicibus gracilibus continuis læte coloratis distinctissima.

2. **Uncinula australiana** Mc Alpine, in Journ. Linn. Soc. N. S. Wa- 3332
les, XXIV (1899) p. 302, t. 23, f. 5-9, Salmon, Monogr. Erysiph. p. 118, t. V, f. 94, 95. — Amphigena; mycelio persistente; peritheciis pro more gregariis, subinde sparsis, 90-140 μ . diam., cellulis contextus 10-15 μ . diam.; appendiculis 7-20, pro more 12, peritheci diametrum subæquantibus, 1-septatis, basi plus minus saturate brunneis, simplicibus, levibus, tenui-tunicatis, sursum vix dilatatis, circ. 5 μ . diam., apice typice helicoideo; ascis in quoque perithecio 3-5, late ovatis v. subglobosis, interdum brevissime stipitatis, 45-50 \times 30-40; sporidiis 5-7, raro 8, ellipsoideis 20-22 \times 10-12.

Hab. in foliis et inflorescentia Lagerstrœmiæ indicæ et L. ovalifoliæ, Sydney Australiæ et Sendai et Tokyo Japoniæ. — Inter *Unc. necatorem* et *Unc. Sengokui* fere media.

3. **Uncinula Prosopidis** Spæg., An. Mus. Nac. Buenos Aires t. XIX 3333
(1909) p. 324. — Mycelio laxissimo ex hyphis tenuibus hyalinis 45 μ . cr., ramoso-intricatis septulatis constituto, amphigeno; peritheciis hinc inde laxè gregariis, sæpius epiphyllis, globulosis 150 μ . diam., atris carnosulo-membranaceis, contextu olivaceo indistincto vix pellucido, setulis radiantibus confertiusculis antice subattenuatis 50-120 \times 5-6, apice obtusiusculis sæpe subincrassatulis, modice circinatis levibus continuis hyalinis ornatis; ascis 6-8 in quoque perithecio, ex ovato subellipsoideis aparaphysatis 50-70 \times 25-30, sæpius bisporis; sporidiis elliptico-subcylindræcis 35 \times 14-15 utrinque obtusis rotundatis, continuis, sæpius grosse biguttulatis hyalinis.

Hab. ad folia viva Prosopidis campestris in Horto botanico bonaërensi, Argentina Amer. austr.

4. **Uncinula incrassata** Salm., Ann. Mycol. VI (1908) pag. 525. — 3384
 Amphigena; mycelio effuso persistente; peritheciis sparsis v. subgregariis parvulis, 100-140 μ . diam., globoso-depressis; appendicibus 60-120 in quoque perithecio, quoad longitudinem inæqualibus, perithecii diametrum dimidium æquantibus nunc integrum paullo superantibus, nunc intermediis, 6-7 μ . cr., ad apicem parietibus incrassatis, apice simpliciter strictimque uncinatis, continuis; ascis 3-7 (immaturis).
Hab. in foliis *Pterocarp*i melliferi, Gazaland Africae (C. F. M. SWYNNERTON) — *U. Tectonæ* affinis, sed appendicibus tunica incrassata et latoribus facile distincta.
5. **Uncinula Tectonæ** Salm., Ann. Mycol. V (1907) p. 479. — Epi- 3385
 phylla; mycelio tenui, effuso persistente; peritheciis subgregariis, hemisphaericis circ. 110 μ . diam., cellulis 10-15 μ . diam.; appendicibus numerosis usque ad 75-100, perithecii diam. subæquantibus, sæpe longitudine varia in quoque perithecio, tenuibus, hyalinis, continuis, subinde sursum crassius tunicatis, basi 5-6 μ . cr., superne 4 μ . cr. apice arcte uncinatis et interdum helicoideis; ascis 4-8 in quoque perithecio, late ovoideis, breviter distincte pedicellatis, 65-70 \approx 38-40; sporidiis 6-8, rarius 4 conglobatis, circ. 25 \approx 14.
Hab. in foliis *Tectonæ* grandis, Jubbulpore Indiæ orient. — Species numero, longitudine et tenuitate appendicum distinguenda.
6. **Uncinula Nothofagi** Thaxter, Botan. Gazette L (1910) pag. 439, 3386
 tab. XIX, fig. 7-10. — Epiphylla v. rarius amphigena; peritheciis mycelio albido persistenti effuso insidentibus, dense congestis v. discretis, globoso-depressis, 80 μ . diam. (70-100 μ), rufo-brunneis, cellulis 10-12 μ . diam.; appendicibus 5-15, continuis, 70-100 μ . long., inferne rectis v. curvatis, rigidis, induratis, brunneo-suffusis; superne spiraliter arcte 4-8-convolutis, apice helicoideo-subinflatis, spiris basilaribus plus minus subfuscis, ceteris hyalinis; ascis late ovalibus, 5-8 in quoque perithecio, suboctosporis; sporidiis oblongo-ellipsoideis 18-20 \approx 10; conidiis subcylindraceis 25-32 \approx 10-15.
Hab. in foliis *Nothofagi* antarcticæ var. *bicrenatæ* a *Taphrina entomospora* occupatis v. rarius in foliis sanis, Punta Arenas Patagoniæ Americæ austr.
7. **Uncinula magellanica** Thaxter, Botan. Gazette 4 (1910) pag. 440, 3387
 tab. XIX, fig. 11-13. — Plerumque epiphylla; perithecio mycelio albido effuso exiguo insidentibus, discretis v. subgregariis, globoso-

depressis, opacis v. subopacis, atro-brunneis, 90-150 μ . diam. sed plerumque 130 μ ., cellulis 10-20 μ . latis; appendicibus 10-22, hyalinis, longis, tenuibus, curvatis v. subflexuosis, subrigidis, 225-400 \approx 5-6, apice subinflatis et subrecurvatis; ascis late clavatis, 55 \approx 25, plerumque 3-4-sporis, sporidiis 20 \approx 10-12, conidiis subcylindræis 35-40 \approx 15-18.

Hab. in foliis Nothofagi antarcticæ var. bicrenatæ, Taphrinâ magellanicâ obsessis, Punta Arenas Patagoniæ America austr.

8. *Uncinula* Mori Miyake, Botan. Mag. Tokyo XXI, n. 240 (1907) 3388
extr. p. 2, cum icon. — Mycelio tenui, septato 3,8-5 μ . cr., hinc inde haustoria lobulata generante, pelliculas alba subrotundas epiphyllas efformante; peritheciis minutis, nigris, hemisphæricis, 92-130 μ . diam., cellulis 10-17 μ . diam.; appendicibus 12-26, pro more 15-17, basi 5-6 μ . cr., lumine (ob tunicæ crassitiem) angustissimo, sursum multo latiore præditis et 7-8 μ . cr., apice summo tenuatis et simpliciter arete uncinatis, 130-216 μ . longis; ascis quaternis, rarius ternis, ovato-ellipsoideis, brevissime pedicellatis, 50-60 \approx 40-50, tetra-pentaspomis; sporidiis ellipsoideis, utrinque rotundatis, 27-35 \approx 15-19, granuloso-farctis, hyalinis.

Hab. in foliis Mori albæ in Japoniæ pluribus locis. — *Uncinulæ flexuosæ*, *Unc. geniculatæ* et *U. Miyabei* nonnullis notis affinis.

9. *Uncinula* Pirottiana Bacc., Funghi Eritrea, Ann. Bot. v. IV (1906) 3389
pag. 273, tav. X, fig. 2. — Hypophylla, mycelio tenui evanido; peritheciis minutis, atris, globosis μ . 84-90 latis, monoascis appendicibus numerosis continuis, perithecium æquantibus, hyalinis, ad apicem attenuatis, arete circinatis; ascis tetra-hexasporis 68 \approx 48; sporidiis hyalinis ellipticis, 24 \approx 14.

Hab. in foliis Ficus sp., Valle Catalaben, Mensa Erythræ Afr. (PAPPI).

10. *Uncinula columbiana* Selby — Syll. XI, p. 252. — Nascitur in 3390
foliis Scutellaris laterifloræ, nec *Uncinulæ* v. *Uncinæ* ut legitur l. c.

MICROSPHÆRA Lév. — Syll. I p. 10, IX p. 368, XI p. 252, XIV p. 463, XVI p. 402, XVII p. 525.

1. *Microsphæra Sophoræ* G. Gándara in Memorias y revista de la 3391
Sociedad científica A. Alzate, Mexico, XXVI, (1908) p. 234, t. I-II.
— Mycelio epiphyllo, arachnoideo, effuso, persistente; peritheciis

globulosis, nigris, superficialibus, sparsis, reticulatis, 100-130 μ . diam.; ascis 3-6 in quoque perithecio, ovoideis, brevissime pedicellatis, 50-60 μ . long., 3-5-sporis; sporidiis ellipsoideis, intus granulosis, 15-20 \approx 8-14; appendiculis 9-15, hyalinis, horizontalibus, inæqualibus, perithecio fere duplo longioribus, 3-6 vicibus dichotome ramosis, ramulis ultimis turgidis, divaricatis, apice acuminatis.

Hab. in foliis vivis *Sophoræ* sp. indet. in Schola Agriculturæ S. Jacinto, Mexico. — Auctor præterea describit sporulas ellipsoideas, hyalinas, nucleatas, numerosas, 2 \approx 1,5, quæ verisimiliter, ut opinamur, *Cincinnobolo* pertinent.

2. **Microsphæra penicillata** (Wallr.) Lév. em. — Syll. I, p. 13. — 3392
ver. **pseudo-Loniceræ** Salm., Ann. Mycol. VI (1908) p. 4. — A typo differt appendicibus apice ter-quinq̄ues regulariter dichotomis, ramulis ultimis plerumque rectis.

Hab. in foliis *Sabiæ japonicæ*, Misato-mura, Tosa Japoniæ (T. YOSHINAGA). — Var. **Yamadai** Salm., l. c. pag. 3. — A typo differt appendicibus apice minus divisis plerumque ramis primis longis, ramulis ultimis sæpe plus minus contortis, maturitate laxè recurvis. — In foliis *Hoveniæ dulcis* et *Juglandis Sieboldianæ* in Japonia (YAMADA, KUSANO et OKAMURA). — Var. **ludens** Salmon, Monogr. Erysiph. p. 154, t. II, fig. 27-30 — A typo dignoscitur appendicibus flexuoso-contortis, apicibus variis, modo rectis, modo recurvatis. — In foliis *Viciæ americanæ*, Dakota, Wyoming et Montana Amer. bor.

ERYSIPHE Hedw. — Syll. I p. 15, IX p. 370, XI p. 253, XVI p. 404, XVII p. 526.

1. **Erysiphe Martii** Lév. — Syll. I, p. 18. — var. **Astragali** Sacc. in 3393
Potebnia, Trav. Soc. Nat. Univers. Kharkov t. XXXVIII (1907).
Appendicibus perithecio pluries longioribus.

Hab. in foliis *Astragali glycyphylli* pr. Kursk Rossic.

2. **Erysiphe taurica** Lév. — Syll. I, p. 16. — var. **Zygophylli** Maire 3394
in Bull. Soc. Sc. Nancy, sér. 3, VI (1905) p. 6, t. II f. 4-6 (extr.).
— A typo differt conidiis longè cylindræis, 57-72 \approx 13-14.

Hab. in foliis *Zygophylli* *Fabaginis* in Asia minore.

3. **Erysiphe Ricini** Speschn., Monit. Jard. bot. Tiflis (1906) p. 14. — 3395
Mycelio epiphylo, raro hypophylo, arachnoideo; hyphis hyalinis 6-9 μ . cr., haustoriis non lobulatis, minutis, spinuliformibus; conidiis facile dilabentibus, elongato-ovoideis v. cylindræis, 36-48 μ .

10-16, verruculosis; peritheciis irregulariter disseminatis, semiimmersis, brunneis, 150-220 μ . diam., appendicibus brevibus, simpliciter furcatis, hyalinis, ramulis undulatis cum mycelio intertextis; ascis in singulo perithecio 17-25, piriformibus, in pedicellum protractis 60-70 \approx 34-40, bisporis; sporidiis ellipsoideis, 26 \approx 20, hyalinis.

Hab. in foliis Ricini communis, Eriwan Caucasi (A. ROLLOFF).

Trib. 2. Eurotiæ Sacc.

EUROTIIUM Link — Syll. I p. 95, IX p. 37, XI p. 254, XVI p. 1123, XVII pag. 527. — De hoc genere cfr. MANGIN in Ann. Sc. nat. Bot. (1908) p. 351.

1. **Eurotium baculatum** (Westl.) Sacc. et Trott. *Penicillium baculatum* 3396

Westling in Svensk Bot. Tidskr. IV (1910) p. 140, f. 3. Status conidioph.: *Penicillium baculatum* Westl., l. c. f. 1-2 (Cfr. suo loco).

— St. ascoph.: peritheciis globulosis, 100-250 μ . diam., flavis, pariete fragili, gracili instructis; ascis globosis v. ovoideis, hyalinis, suboctosporis; sporidiis lenticularibus, 5,2-6 μ . diam. e latere 4,2-4,8 μ . cr. margine subcanaliculatis.

Hab. in foliis aliquot plantarum in M. Areskutan Jemtlandiæ.

— *Eurotii* gen. st. conidioph. est pro more *Aspergillus*; hinc ulterius inquirendum an huic speciei vere adscribenda sit species citati *Penicillii*.

2. **Eurotium Chevalieri** Mangin, Ann. Sc. Nat. IX ser. (1908) p. 361, 3397

cum icon. — Mycelio albo effuso floccoso, sæpe repente et margine fimbriato, dein ob conidia virescente; conidiophoris ut in *Aspergillo glauco*; conidiis sphaericis v. ovoideis verrucosis, 5,6-7,4 μ . diam.; peritheciis in mycelio nidulantibus, copiosis, minutis, sulphureis; ascosporis lenticularibus peripherice distincte et profunde sulcatis, 4-7 e latere 3,7 μ .

Hab. in substantiis organicis putrescentibus ex Algeria (CHEVALIER).

3. **Eurotium Amstelodami** Mangin, Ann. Sc. Nat. IX sér. pag. 360, 3398

cum icon. — Mycelio albo, effuso, subvelutino, dein ob conidia virescente margine flocculoso; conidiophoris cylindræis 150 μ . long., 10 μ . cr., apice subgloboso-verruculosis; sporophoris brevissimis paliformibus obtusis; conidiis catenulatis, sphaericis, tenuiter echinulatis, viridibus, 2,8-4,7 μ .; peritheciis in mycelio ni-

dulantibus, copiosis, minutis, sulphureis; sporidiis lenticularibus hyalinis, levibus, 4,7 e latere 3,7 μ ., peripherice distincte sulcatis.

Hab. in substantiis organicis putrescentibus in Gallia ex Hollandia. — Quoad characteres culturæ confer L. Mangin l. c.

4. *Eurotium fumigatum* (Grijns) Sacc. et Trott. *Aspergilli fumigati* 8399
st. ascoph. Grijns in Centralbl. Bakt. XI (1907) p. 331. — Peritheciis minutis, contextu bistratoso e cellulis prismaticis atrorubris formato, granulis virescentibus valde refringentibus consperso; ascis octosporis; sporidiis fusco-rubris, tenuiola anulari æquatoriali (elaterium fungente) cinctis.

Hab. in decocto hordeaceo socio st. conidioph. *Aspergillo fumigato*, in Germania.

CRYPTOTHECIUM Penz. et Sacc. — Sacc. — Syll. XIV, p. 465. — Prof. Höhnelt (Fragm. z. Mykol. VIII, p. 23) contendit hoc genus ad *Byssonectriam* inter Hypocreaceas referendum esse. Hoc vero peritheciis minutissimis, in subiculo omnino peculiari a matrice libero nidulantibus præditum a Nectriaceis probe distinguitur.

SACCARDIA Cooke — Syll. I, p. 24, IX p. 37, XI p. 253.

1. *Saccardia Durantæ* Pat. — Syll. XI, p. 253. — var. *Rickii* Rehm, 8400
Ascom. exsicc. (1907) n. 1698, Ann. Myc. V (1907) pag. 83. — Peritheciis plerumque arcte congregatis, glabris, excipulo fusco-cæruleo tenuissime parenchymatico, ascos subsenos includentibus; ascis globosis dein ovoideis, crasse tunicatis, 20-30 \times 18, octosporis; sporidiis subclavatis, 3-septatis, 10-12 \times 5, hyalinis, una alterave cellula interdum longitudinaliter divisa; paraphysibus, nullis.

Hab. in pagina inf. foliorum Schini weimanniæfolii, Sao Leopoldo, Rio Grande do Sul Brasiliæ (prof. Rick).

Trib. 3. Englerulaceæ P. Henn.

Syll. XVII, p. 529. — De hac familia cfr. v. Höhnelt Fragm. z. Myk. VII, in Sitzungsber. d. k. Akad. d. Wissensch. Wien, CXVIII, Abt. I, April 1909, pag. 318. Teste hoc auct. *Englerula Macaranga* P. Henn. esset Perisporiaceæ *Dimerio* affinis; e contra *Saccardomyces bactridicola* P. Henn. (a quo vix differret *S. socius* P. Henn.) esset *Ophionectrice* proximus.

ENGLERULA P. Henn. — Syll. l. c.

1. *Englerula carnea* (Ell. et Mart.) v. Höhn. Fragm. z. Mykol. VII, 8401
p. 54. — Ita nuncupanda esset, teste Höhneltio, *Asterella carnea* (Ell. et M.) Sacc. — Syll. IX, p. 393.

SCHIFFNERULA v. Höhn., *Fragm. Mykol.* VII (1909) p. 55 (Etym. a doct. VICT. SCHIFFNER, professore vindobonensi). — Subiculum tenue arcte adnatum. Hyphæ pseudopodiis 1-cellularibus et conidiis sessilibus, septatis præditæ. Perithecia in hyphis pleurogena, fusca, irregulariter globosa, astoma, initio distincte cellulosa, dein histolysis ope subanhista. Asci aparaphysati, ovoidei, pauci, octospori. Sporidia bicellularia, hyalina.

1. **Schiffnerula mirabilis** v. Höhn. l. c. p. 56. — Subiculo epiphylllo 3402 tenuissimo, 1-3 mm. lat., griseo-brunneo, interdum late confluyente, hyphis 6-8 μ . cr., griseo- v. violaceo-brunneis, hyphopodiis alternis, 10-14 \times 8 ovoideo-globosis, continuis præditis, ramulis brevibus, lateralibus; conidiis paucis sessilibus, falcatis, 4-cellularibus, brunneolis 40-42 \times 11-12; peritheciis copiosis initio brunneis dein hyalinis, lateralibus, sæpe concrecentibus, sessilibus v. breve pedicellatis, tuberculiformibus, 48-76 \times 44-55, astomis; ascis 1-3 in quoque perithecio, aparaphysatis, octosporis 24-36 \times 20-28, mucro obvolutis; sporidiis conglobatis, constricto-1-septatis, 19-24 \times 9-12, utrinque rotundatis, hyalinis.

Hab. in foliis *Passifloræ* spec. in silvis Depok ins. Javæ (V. SCHIFFNER).

2. **Schiffnerula secunda** v. Höhn., *Fragm. z. Mycol.* X (1910) p. 20. 3403 — Subiculo epiphylllo, minuto, subrotundo, nigricante, adnato, ex hyphis 6-8 μ . cr., brunneis, opposito-alterneque ramosis, reticulatisque; hyphopodiis copiosis ovoideis v. subglobosis, 1-cellularibus 11-12 \times 9-12; peritheciis copiosis, tuberculiformibus, subdepressis, 44-88 μ . lat., molliusculis, astomis, contextu unistratoso ex cellulis 8-10 μ . diam., extus prominentibus conflato; ascis aparaphysatis, 2-3 in quoque perithecio, ovoideo-globosis, 35-40 μ . diam., 8-sporis; sporidiis ellipsoideis, hyalinis, medio 1-septato-constrictulis, utrinque rotundatis, 22-29 \times 12-16.

Hab. in foliis *Compositæ* indet., Sao Leopoldo, Rio Grande do Sul Brasiliæ (THEISSEN).

HYALODERMA Speg. — *Syll.* IX p. 437, XI p. 270, XIV p. 465, XVI p. 406.

1. **Hyaloderma Afzelii** v. Keissl, *Ann. Mycol.* VII (1909) p. 291. — 3404 Epiphyllum, rarius hypophyllum; mycelio vix perspicuo; peritheciis numero 2-5 aggregatis (rarius singulis), magnis, c. 300-400 μ . diam., globulosis, atris; ascis numerosis, cylindræis, apice rotundatis, basim versus vix attenuatis, tenuissime tunicatis, c. 85-90 \times

12-15, octosporis, aparaphysatis; sporidiis acicularibus, flexuosis, eseptatis, eguttulatis, hyalinis, c. $80 \approx 1$.

Hab. in foliis vivis *Afzelia* sp. in insula Salomon Bougainville (RECHINGER).

2. *Hyaloderma Gardeniæ* v. Keissl., Ann. Mycol. VII (1909) p. 290. 3405

— Epiphyllum; mycelio vix perspicuo, inter hyphas *Meliolæ* crescente (an in eis parasitico?), brunneolo, cellulis oblongis composito; peritheciis laxè gregariis, minutissimis, c. 80 μ . diam., globosis, astomis, fatiscentibus, sordide violaceis; ascis paucis ellipticis, basim versus vix attenuatis, tenuiter tunicatis, 8-sporis (?) c. $25-30 \approx 7-9$; paraphysibus plerumque sparse ramosis, ascis fere duplo longioribus, $45-50 \approx 1$, hyalinis; sporidiis acicularibus, leviter curvatis, acutis, hyalinis, eseptatis, c. $20-22 \approx 1.5-2$.

Hab. ad folia viva *Gardeniæ* Lanutoo, in consortio plagarum *Meliolæ* sp. (vel potius parasitans) in insula Samoa Upolu prope lacum Lanuanea (RECHINGER).

3. *Hyaloderma Winklerianum* P. Henn., Engl. Jahrb. XXXVII (1905) 3406

p. 125. — Peritheciis sparsis, v. subaggregatis, in mycelio *Meliolæ* parasiticis, subglobosis v. ovoideis, baud papillatis, albidis, 100-140 μ . diam., contextu subcelluloso, hyalino, setulis rigidis, erectis, hyalinis, subulatis, $50-80 \approx 4-5$, vestitis; hyphis repentibus effusis, septatis, ramosis, hyalinis circumdatis; conidiis fusoidis, $40-60 \approx 4-6$, pedicellatis, 4-guttatis, dein pluriseptatis, submuriformibus; ascis clavatis, apice crasse truncatis, obtusis, 8-sporis, $55-65 \approx 12-15$, paraphysibus filiformibus, hyalinis, 1,5 μ . cr.; sporidiis conglobatis longe fusoidis, rectis v. curvulis, utrinque acutis, 7-septatis, $35-40 \approx 4-4.5$, hyalinis.

Hab. in mycelio *Meliolæ* spec. ad folia *Marantaceæ* sp., Camerun Africae trop. (WINKLER).

4. *Hyaloderma Uredinis* Raciborski, Bull. Ac. Sc. Cracovie (1909) 3407

p. 376. — Peritheciis hypophyllis confertis griseo-albis, globosis, vertice depressis, 100-150 μ . diam., astomis, appendiculis binis præditis; cellulis contextus polygoniis, 3-8 μ . diam.; deorsum hyphis copiosis, tenuibus, ramosis inter uredosoros penetrantibus, sursum setulis hyalinis, $40-65 \approx 6$, levibus coronatis; ascis filiformi-paraphysatis, apice rotundatis, deorsum tenuatis, $80-90 \approx 12-16$, octosporis; sporidiis linearibus utrinque rotundatis, levibus, $55-62 \approx 3$, parallelis, 20-pluriseptatis, hyalinis.

Hab. in soris uredineis *Sphærophragmii* *Mucunæ* ad folia *Mucunæ* sp. in insula Java.

HYALOTHELES Speg., Fungi Paulist., Rev. Mus. La Plata t. XV (1908) p. 11 (Etym. *hyalos* vitrum et *thele* papilla). — Perithecia pusilla, sparsa, subglobosa, astoma, anhistia, thallo mucedineo insidentia. Asci clavati aparaphysati octospori; sporidia didyma, loculis globosis mox secedentibus coloratis. Genus pulchellum ad *Englerulas* etiam nutans.

1. **Hyalotheles dimerosperma** Spegazz., l. c., fig. c. — Maculis nullis; 3408 peritheciis hypophyllis sparsis, fuscis, tunica tenuissima præditis glabris, superne rotundatis inferne coarctato-applanatis, 50–80 μ . diam., substipitatis, thallo vix evoluto insidentibus; ascis 15–30 antice late rotundatis postice cuneatis breviter crasseque pedicellatis 20–30 \times 14–18; sporidiis polystichis e chlorino fuscis, 12 \times 6, loculo supero parum majore.

Hab. in foliis vivis Rubi urticifolii prope Casa do Isolamento, Sao Paulo Brasilia (USTERI).

DIMEROSPORIELLA Spegazz., Fungi Paulist., Rev. Mus. La Plata t. XV (1908), p. 10 (Etym. a *Dimerosporio*, cui affinis). — Perithecia minuta ostiolata, anhistia, subhyalina, thallo mucedineo insidentia, polyascea. Asci subcylindracei octospori paraphysati; sporidiis didymis hyalinis. — Est *Dimerosporium* thallo et peritheciis anhistis ostiolatis donatum, inter *Englerulas* adnumerandum. Gen. *Dimerosporiella* v. Höhn. Fragm. z. Myk VIII (1909) p. 22 est omnino diversum et continet *Pisomyxam Amomi* B. et C. — Syll. IX, p. 374. — a typo Cordaeano diversam et potius *Dimerosporio* et *Alinæ* affinem.

1. **Dimerosporiella paulistana** Spegazz., Fungi Paulist., Rev. Mus. La Plata t. XV, pag. 11, fig. B. — Maculis nullis v. vix pallescentibus; peritheciis hinc inde gregariis superficialibus pusillis, fuscidulis, glabris, 80 \times 60 umbonato-ostiolatis, 6–12-ascis; ascis elliptico-cylindraceis antice obtuse rotundatis 50 \times 10, basi brevissime noduloseque pedicellatis; paraphysibus paucis longioribus filiformibus obvallatis; sporidiis distichis, levibus minutis, 14–16 \times 4, loculis æquilongis, supero obtuso, infero conoideo-acuto donatis, ad septum vix constrictis.

Hab. in foliis languidis Buddlejæ cujusdam, Moca Ipiranga Brasiliæ (USTERI).

Trib. 4. Perisporiaceæ Sacc.

Sect. 1. Hyalosporæ.

CEPHALOTHECA Fuck. — Syll. I p. 36, IX p. 377, XIV p. 465, XVI p. 407.

1. *Cephalotheca prolifica* (Bain.) Sacc. et Trott., *Gliocladium prolif-* 3410
cum Bainier Bull. Soc. Mycol. Fr. (1910) p. 386 (st. ascophor.),
t. XXVI, fig. 2-5. — Peritheciis ex mycelio *Gliocladii* orientibus,
conglomeratis, sphaericis usque ad 1 mm. diam., astomis, grosse
cellulosis, levibus, isabellinis; ascis pluribus, filamentis brevibus
suffultis ovoideo-oblongis, sursum crassioribus, 8-sporis; sporidiis
infra monostichis, apice distichis, sphaericis, 25-28 μ . diam. epi-
sporio minute verruculoso, intus 1-2-guttulatis.

Hab. in palea uda socio st. conidioph. *Gliocladio* proli-
fico in Gallia.

2. *Cephalotheca Kriegeri* Rehm, Ascom. exs. fasc. 44, n. 1850, Ann. 3411
Mycol. VII (1909) p. 405. — Peritheciis gregariis, globosis, gla-
bris, nigris, poro pertusis, crasse parenchymaticis, cellulis magnis
violaceo-fuscis contextis, 250 μ . diam., sessilibus, in mycelio hy-
pharum ramosarum 2 μ . cr. ab aliis rectis 3-4 μ . cr. percursarum
insertis; ascis ellipsoideis, 15-20 \times 8-9, in hyphis ramosis tenerri-
mis, 1,5 μ . cr., rosulato-confertis sessilibus; sporidiis fusoides re-
ctis v. subcurvatis, 8-10 \times 3-3,5, tristichis, intra ascos hyalinis,
extra fuscidulis.

Hab. ad chartam albam intra librum putrescentem in silva pr.
Königstein Saxonie (KRIEGER).

MICROMASTIA Speg., An. Mus. Nac. Buenos Aires t. XIX (1909)
p. 324 (Etym. a *micro*s minutus et *mastos* mamilla). — Perithecia
superficialia globosa, ostiolo eximie papillata non perforato donata,
atra membranacea, subiculo mucedineo parco insidentia. Asci glo-
bosi octospori; sporidiis e globoso trigonis, 1-cellularibus, hyalinis.
— Gen. *Anixie* peraffine sed sporarum fabrica ab omnibus ad
huc notis præcipue distinctum.

1. *Micromastia trigonospora* Speg., l. c. p. 325, fig. 6. — Peritheciis 3412
minutis, 120 μ . diam., sparsis eximie mamillatis, glabris, nitidu-
lis, contextu minute parenchymatico olivaceo vix pellucido, basi
hyphis radiantibus parcis tenuibus 3-5 μ . cr. ramulosis septulatis

hyalinis cinctis; ascis sæpius globosis 10-12 \times 8-10, octosporis; sporidiis pusillis 3-3,5 μ . diam., obtuse angulatis e latere compressis, levibus, hyalinis.

Hab. ad culmos aridos putrescentesque Festucae Hieronymi in cella humida, La Plata, Argentina Amer. austr.

2. **Micromastia fimicola** Syd. in Diedicke Aufzähl. Erfurts Micromyc. 3413 (1910) p. 26 (Jahrb. K. gem. Wiss. Erfurt, XXXVI, p. 146). — Peritheciis sparsis, superficialibus, globosis, membranaceis, atris, glabris, 175 μ . diam., collo 40-50 μ . longo, usque ad 30 μ . lato præditis, basi hyphis tenuibus, hyalinis, septatis, ramulosis cinctis; ascis numerosissimis, globosis v. ovato-globosis, octosporis, 9-10 diam.; sporidiis trigonis, levibus, hyalinis v. hyalino-fuscidulis, 3-5 μ . diam., continuis.

Hab. in fimo Cuniculorum in agro Erfurtensi. — Sporidia in cirrum rubiginosum expulsa.

POLYSPORIDIUM Syd., Ann. Mycol. VI (1008) p. 528 (Etym. polys *multus* et *sporidium*). — Perithecia in mycelio tenui, fibrilloso, atro subsuperficialia, applanato-globosa, membranacea, astoma. Asci ovati v. saccati, polyspori, aparaphysati. Sporidia continua, hyalina, conglobata. Subiculo mycelico et sporidiis continuis a *Pompolysporio* Magn. dignoscitur.

1. **Polysporidium Bornmülleri** Sydow, l. c. p. 528. — Mycelio maculas 3414 minutas $\frac{1}{2}$ -1 $\frac{1}{2}$ mm. latas, atras efformante, fibrilloso, tenui, matrici arcte adnato, ex hyphis repentibus fuliginis septatis varie ramosis et anastomosantibus, crassitudine variis, 6-15 μ . cr., composito; peritheciis paucis aggregatis, applanato-globosis, atris, astomis, membranaceis, 90-140 μ . diam., contextu brunneo, pseudoparenchymatico; ascis ovoideis v. saccatis, apice rotundatis, leniter incrassatis, sessilibus, 38-62 \times 24-32, sexdecimsporis; sporidiis conglobatis, oblongo-ellipsoideis v. subnavicularibus, continuis, hyalinis, eguttulatis, 18-32 \times 7-11.

Hab. in caulibus Dianthi orientalis, Kermanschah in monte Kuh Schiris Persiæ occid. (Th. STRAUSS, comm. J. BORNMÜLLER).

MELIOLOPSIS Sacc. — Syll. I p. 68, IX p. 375.

1. **Meliolopsis Boldæ** Speg., Fungi Chilenses (1910) pag. 24, cum 3415 icon. — Subiculum hypophyllum setulosum, setulis simplicibus 150-250 \times 6-10; peritheciis sparsis subglobosis parvis, astomis, glabris submembranaceis, collabescentibus, 150-180 μ . diam.; ascis

clavulatis longe tenuiterque pedicellatis aparaphysatis, $50-55 \times 5-6$; sporidiis elliptico-navicularibus minutis, hyalinis, $7-8 \times 1,7-2$.

Hab. in foliis vivis Boldoe fragrantis, Cerro Caracol de Concepción Chile Amer. austr.

Sect. 1. Phæosporæ.

CHÆTOMIDIUM Zopf — Syll. I p. 39, IX p. 378.

1. **Chætomidium chlorochætum** Speg., An. Mus. Nac. Buenos Aires 3416 t. XIX (1909) p. 336. — Peritheciis globosis $150-200 \mu$. diam., primo villo duplici denso vestitis, demum plus minusve glabratissimis, atris, astomis v. obsoleto ostiolatis, membranaceis, contextu opaco olivaceo indistincto; pilis minoribus densis tenuibusque, $100-200 \times 2-3$, majoribus paucioribus elongatis crassioribus, $500-1000 \times 6-7$, simplicibus rectis acutiusculis, dense septulatis, subopacis virescenti-olivaceis; ascis antice obtusiusculis postice longe attenuato-pedicellatis, $40-100 \times 2$, aparaphysatis, octosporis; sporidiis levibus $12-14 \times 7-10$ utrinque sæpius subapiculatis, grosse 1-guttulatis, diu hyalinis serius fumosis.

Hab. ad culmos aridos putrescentes Festuæ Hieronymi in cella humida, La Plata Rep. Argentina Amer. austr.

2. **Chætomidium magnum** Bain. Bull. Soc. Mycol. Fr. XXV (1909) 3417 p. 194, t. 10, f. 1-5 (sine diagnosi). — Peritheciis subglobosis, c. 550μ . diam., nigricantibus, astomis, dense piloso-setulosis; setulis filiformibus, e cyaneo nigricantibus aliis rectis, aliis eximie tortuoso-spiralibus, $8,4 \mu$. cr., peritheciis diametro triplo longioribus; ascis clavatis, deorsum sensim et longe stipitatis, apice rotundatis, octosporis; sporidiis subdistichis, e globoso ellipsoideis, $16,8 \times 12-14$, (ex icone perfecte sphaericis!) ex olivaceo brunneo-fuligineis.

Hab. in excremento Canis in Gallia.

3. **Chætomidium phyllactineum** Bain. Bull. Soc. Mycol. Franc. XXV 3418 (1909) p. 193, t. 11, f. 7-10. — Peritheciis confertis, globosis, 200μ . diam. initio e hyalino fulvis diaphanis, demum nigricantibus opacis, ubique laxè setulosis; setulis divergentibus, 180μ . long., rectiusculis, simplicibus apice obtusulis, basi dilatatis 14μ . cr., continuis, rigidulis, fuligineis; ascis numerosis ovoideis vix stipitatis, diametro suo duplo longioribus, octosporis; sporidiis fusosideo-limoniformibus, $19-20 \times 8-9,5$.

Hab. in charta emporetica putri in Gallia. — Ob appendiculas Phyllactiniam in mentem revocat.

Sect. 3. Hyalodidymæ.

WENTIOMYCES Koord., Botan. Untersuch. (1907) p. 148 (Etym. a prof. F. A. F. C. WENT batavo). — Mycelium hypophyllum effusum, fuscum, septatum. Perithecia aggregata vel sparsa, astromatica, superficialia, globosa v. ovoideo-globosa, astoma, prosoplectenchymatica, membranacea, basi foliis adnata, appendiculata, appendiculis dimorphis; aliis numerosis filiformibus, longis v. longissimis, flexuosis, simplicibus v. rarissime subsimplicibus, dilute fuliginis, apicem versus subhyalinis, apice obtusatis, continuis; aliis brevioribus, rigidis, rectis, paucis, plerumque 4-6, obscure fuliginis, apice divisis, ramulis brevibus v. brevissimis subdilatato-rotundatis. Asci numerosi c. 10-15, fasciculati, cylindraneo-clavati, octospori, apapophysati, crasse tunicati, apice rotundati. Sporidia subconglobata v. subdisticha, hyalina, medio uniseptata haud stricta.

1. *Wentiomycès javanicus* Koord., l. c. p. 168, fig. 9. — Peritheciis 3419 50-60 μ . diam.; peritheciis appendiculis longioribus filiformibus simplicibus 50-160 \times 2-3,5; appendiculis brevibus dichotome ramosis 12-32 \times 4; ascis 24-26 \times 4-6; sporidiis 8-9 \times 2,5 \times 3.

Hab. in foliis emortuis Fici elasticæ prope Penunggalan prov. Kedu ins. Javæ (KOORDERS).

CHILEMYCES Speg., Fungi chilenses (1910) p. 27 (Etym. *Chile et myces* h. e. fungus chilensis). — Perithecia superficialia globosa astoma fuscula, mycelio albido insidentia et obvoluta. Asci elongati apapophysati octospori; sporidiis minutis didymis hyalinis.

1. *Chilemyces valparadisiacus* Speg., l. c. cum icon. — Peritheciis 3420 pusillis membranaceis, 75-100 μ . diam.; ascis subclavulatis breviter pedicellatis, 40-45 \times 6-7; sporidiis distichis ad septum non v. vix constrictis, 9-10 \times 3.

Hab. in foliis emortuis Puyæ chilensis, Cerro Alegre de Valparaiso, Chile Amer. austr.

DIMEROSPORIUM Fuck. — Syll. I p. 51, IX p. 401, XI p. 257, XIV p. 466, XVI p. 408, XVII p. 533.

1. *Dimerosporium Berliniæ* Pat. et Har., Bull. Soc. Mycol. Fr. XXIV 3421
Syll. fung. XXII (V-1912)

(1908) p. 15. — Maculis præcipue hypophyllis, umbrinis, irregularibus, ex hyphis repentibus, mollibus, septatis, absque hyphopodiis efformatis; peritheciis globosis, fuscis, 100-140 μ ., contextu anguloso-celluloso, cellulis circiter 8 μ . diam.; ascis ovoideis subsessilibus v. nodulo instructis, superne crassissime tunicatis, 62 \approx 32, 8-sporis; sporidiis ellipsoideis, una fine leniter attenuatis, palide fuscis, transverse uniseptatis, levibus, 32-36 \approx 8-10.

Hab. in foliis Berlinæ sp., Chari Ungourras Africae (A. CHEVALIER).

2. **Dimerosporium mindanaense** P. Henn., Hedwigia XLVII (1908) 3422 p. 253. — Maculis mycelii effusis, atris, hyphis repentibus ramosis, fuscis in societate Meliolæ; peritheciis subglobosis, atro-cellulosis, 60-80 μ . diam.; ascis clavatis, obtusis, paraphysatis, 8-sporis, 22-30 \approx 8-10; sporidiis subdistichis ovoideis, 1-septatis, constrictis, hyalinis, 9-12 \approx 3.

Hab. in foliis Eugeniæ sp., Mindanao, Davao ins. Philippin. mart. 1904 (COPELAND).

3. **Dimerosporium pellicula** Syd., Ann. Myc. V (1907) pag. 339. — 3423 Hyphis repentibus, dense intricato-ramosis, remote septatis, fuliginis, pelliculas aterrimas epiphyllas facile secedentes plerumque totum folium occupantes efformantibus; conidiis sarcinuliformibus 4-8-cellularibus, fuliginis, cellulis singulis ca. 7-9 μ . diam.; peritheciis globosis v. subglobosis, fuliginis, c. 90-110 μ . diam.; ascis variabilibus, fusoides v. clavatis, plerumque attenuatis, rectis v. sæpius varie curvulis, 35-50 \approx 12-26 octosporis; sporidiis irregulariter distichis, oblongis, medio 1-septatis, non constrictis, hyalinis, intus nebulosis, 14-18 \approx 3-4.

Hab. in foliis Manihotis utilissimæ, in Costa Rica (TODD). — *Dimerosporio pulchro* Sacc. proximum.

4. **Dimerosporium baccharidifolium** Speg., Fungi Paulist., Rev. Mus. 3424 La Plata t. XV (1908), p. 14. — Peritheciis erumpenti-superficialibus plerumque epiphyllis, hinc inde laxè gregariis, subglobosis 80-90 μ . diam., membranaceo-coriacellis, contextu minute parenchymatico olivaceo, subiculo destitutis, glabris, ostiolatis; ascis sursum crasse tunicatis deorsum breviter crasseque pedicellatis 40-50 \approx 15-20, paraphysibus paucis filiformibus obvallatis, octosporis; sporidiis distichis hyalinis, medio uni-septatis constrictis, 14 \approx 4, loculo supero obtusiusculo infero graciliore acutiusculo.

Hab. in foliis vivis Baccharidis cujusdam prope Sao Paulo Brasilia (USTERI) — A *Dimerio baccharidicola* P. Henn. certe di-

versum et cum *Dim. Baccharidis* Sacc. et *D. punctiformi* P. Henn. non comparandum.

5. *Dimerosporium Rickianum* Sacc. et Syd. in Saccardo, Not. Myc. IX, 3425 Ann. Myc. v. V (1907) p. 177. — Subiculo epiphylllo, superficiali, maculiformi, fusco-olivaceo v. subrufo, ex hyphis angustissimis, 4-5 μ . cr., repentibus, rectiusculis, radiantibus obsolete septulatis formato; maculis 2-4 mm. latis v. conflundo amplioribus; peritheciis in subiculo subsuperficialibus, gregariis, minutissimis, globulosis, 60-80 μ . diam., astomis, verticeque minute sinuose dehiscentibus; contextu minute celluloso, membranaceo, rufo-fusco; ascis ovoideis, apice obtusis, basi breviter apiculato-stipitatis, 36 \approx 14, octosporis; sporidiis subtristichis, fuscoideis, utrinque acutis, rectiusculis, 14-15 \approx 4, uniseptatis, non constrictis, eguttulatis, hyalinis.

Hab. in foliis adhuc vivis plantæ ignotæ (arborescentis?), Sao Leopoldo Brasiliæ (Pat. J. RICK, communic. H. SYDOW).

6. *Dimerosporium minutissimum* v. Höhn. Fragm. Mykol. VII (1909) 3426 p. 45. — Epiphyllum pelliculas 4-5 mm. latas, nigricantes, tenues, subinde confluentes formans; hyphis 2-3 μ . cr., irregulariter flexis; peritheciis ovoideis, 45-60 μ . diam., tenui-membranaceis, sursum obtuse conoideis, glabris, superficialibus sparsis; hyphis sterilibus erectis, septatis, brunneis, 80 \approx 4-5, apice conidium cylindraceum 2-4-cellulare, 18-22 \approx 2-4 gerentibus; ostiolo nullo v. obsoleto; paraphysibus filiformibus dein evanidis; ascis paucis ovoideo-ellipticis v. breviter clavatis, infra inflatis, apice incrassatis, octosporis, 21-36 \approx 11-13; sporidiis clavulatis, polystichis, hyalinis, bicellularibus, cellula sup. paullo latiore et brevior, rectis curvulisve, utrinque rotundatis, 12-14 \approx 3-4, extus submucosis.

Hab. in foliis arborum, socia *Asterina* consimili in Horto botanico Buitenzorg ins. Java. — *D. subpiloso* affine.

7. *Dimerosporium Adianti-curvati* Rehm, Ann. Mycol. V (1907) p. 522. 3427 — Peritheciis in maculis hypophyllis fusco-nigricantibus oblongis, ca. 1 cm. long., 0,5 cm. lat., ex hyphis *Meliolæ* cujusdam centrifugis formatis gregariis, sessilibus, globulosis, atris, glabris, 60-80 μ . diam., parenchymatico-contextis ad basim hyphis simplicibus fusciculis affixis; ascis ovalibus, apice crasse tunicatis, 30-35 \approx 10-12 octosporis; sporidiis oblongo-clavatis, rectis, hyalinis, non constrictis, 12 \approx 3, 2-3-stichis; paraphysibus tenerimis, ramulosis.

Hab. in fronde *Adianti curvati*, Sao Francisco, Brasilia

(ULE comm. Dr. PAZSCHKE). — Ab affini *Dim. tropicali* sporidiis angustioribus, non constrictis dignoscendum.

8. **Dimerosporium apertum** Syd., Engler's Bot. Jahrb. 45. Bd. (1910) 3428 p. 263. — Peritheciis in mycelio *Meliolæ* parasiticis; mycelio tenui, parce evoluto, ex hyphis tenuibus flavidis v. hyalino-flavis ramosis 3-4 μ . cr. composito; peritheciis gregariis, globosis, glabris, atris, 90-140 μ . diam., centro poro subrotundo distincto apertis; ascis clavatis, apice rotundatis, subsessilibus, 35-45 \times 8-11, octosporis; sporidiis distichis, subfusiformibus, medio 1-septatis constrictisque, utrinque leniter attenuatis, hyalinis v. subhyalinis, 12-14 \times 3,5-4; paraphysibus numerosis, hyalinis, filiformibus, ascos superantibus; pyrenidiis forma, magnitudine et structura perithecia æmulantibus; pyrenidiosporis continuis, ovatis v. ellipsoideis, hyalinis, 4-5 \times 2-3,5.

Hab. in mycelio *Meliolæ* ejusdam in foliis *Rhynchosporæ* sp. — Africæ trop. Germaniæ (Bussè). — *Dimerosp. meliolicolæ* affine. *Meliola* videtur *Mel. amphitrichæ* similis.

9. **Dimerosporium appendiculatum** Earle, Bull. of the New York Bot. Gard. (1904) p. 303. — In mycelio *Asterinæ* parasiticum; mycelio proprio parco ex hyphis pallidis, 3 μ . cr., agglutinatis constante; peritheciis globosis, 70-100 μ . diam., molliusculis, contextu e cellulis 6-8 μ . diam. formato, appendicibus seu setis 12-20 curvatis, atro-fuscis, opacis, obtusis, 30-40 \times 4 armato; ascis fasciculatis, late clavatis v. anguste obovatis, stipitatis, 8-sporis, 35-50 \times 10-12; sporidiis inordinatis, pallide fuscis, cylindraceis, æqualiter 1-septatis, vix constrictis, 14-16 \times 4.

Hab. parasiticum in *Asterina* *Sidæ* ad folia *Sidæ* carpinifoliæ, Porto Rico (HELLER) et Jamaica (EARLE).

10. **Dimerosporium Balladynæ** Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 373. — Hyphis brunneis, septatis, 2-3 μ . cr., hyphopodiis et setis carentibus, sed hinc inde protuberantiis præditis; irregulariter flexis, crebro ramosis, in subiculo *Balladynæ* parasiticis; peritheciis atro-brunneis, globosis, sessilibus, tenui-tunicatis astomis, 95-120 μ . diam.; ascis tereti-clavatis, curvulis, 40-48 \times 12-14, apice acutato-rotundatis, tenui-tunicatis, octosporis; paraphysibus genuinis nullis sed tantum hyphis brevissimis coalitis; sporidiis bicellularibus, levibus, 11-13 \times 4-5, cellulis inæqualibus, membrana brunnea.

Hab. in subiculo *Balladynæ* *Medinillæ* pr. Salak ad Buitenzorg ins. Javæ.

DIMERIELLA Spegazz., Fungi Paulist., Rev. Mus. La Plata t. XV (1908) p. 12 (Etym. a *Dimerio* cujus est analogum genus). — Subiculum parcum. Perithecia subglobosa, astoma, setulosa. Sporidia didyma, hyalina, octona. — A gen. *Dimerosporio* dignoscitur imprimis peritheciis setulosis. — *Dimerosporia* plurima descripta sec. cl. Spegazzini huc ducenda, e. gr.: *Dimeriella dubiosa* (Speg.), *D. Asterinarum* (Speg.), *D. guarapiensis* (Speg.) *D. solanicola* (B. et C.), *D. Elliotti* (A. L. Smith), *D. coronata* (Speg.), *D. Meyeri-Hermannii* (P. Henn.). — Auctore cl. Spegazzinio, l. c. p. 13, gen. n. *Phæodimeriella* Speg. a *Dimeriella* dignoscendum est sporidiis coloratis et amplectitur imprimis: *Ph. Engleriana* (Henn.), *Ph. hamata* (Penz. et Sacc.), *Ph. cetotricha* (Pat. et Har.) *Ph. tasmanica* (Massee), *Ph. occulta* (Rac.) etc.

1. **Dimeriella hirtula** Spegazz., l. c. fig. D. — Maculis nullis sed ma- 3431
trice tota plus minusve fusciscenti; peritheciis superficialibus perpusillis subhemisphaericis 60-90 μ . diam., laxe gregariis, subiculo parvissimo insidentibus, nigris, 9-12 setulis 1-2-cellularibus acutis rigidulis 20-30 \times 4-5 adspersis, membranaceis, contextu parenchymatico fuligineo parum distincto; ascis aparaphysatis, obovatis, 35-40 \times 15-18, octosporis subsessilibus; sporidiis distichis v. subconglobatis medio uniseptatis 14 \times 5, loculis isomacris, conoideis, acutiusculis.

Hab. in foliis vivis *Baccharidis* sp., Ipiranga até Moça Brasileira (USTERI). — Species *Dimerosporio punctiformi* P. Henn. certe peraffinis, satis tamen distincta videtur.

2. **Dimeriella horridula** Syd., in Theiss. Ann. Mycol. VII (1909) p. 352. 3432
— Epiphylla, maculas rotundatas 2-5 mm. latas efformans; mycelio parce evoluto, ex hyphis flexuosis septatis fuscidulis 3,5 μ . cr. composito; peritheciis gregariis globosis, astomis, demum depressis, superficialibus, 75-105 μ . diam., præcipue basi v. in parte inferiore pilis longissimis rectis v. subrectis fuscis parce septatis 100-160 μ . long. et 4-5 μ . cr. dense obsitis; ascis cylindraceo-clavatis, apice obtusis, sessilibus v. brevissime noduloso-stipitatis, 8-sporis, 24-34 \times 8-11; sporidiis distichis, oblongo-ellipsoideis, primo 4-guttulatis, dein medio 1-septatis, non constrictis, hyalinis, 8-11 \times 2,5-3; paraphysibus filiformibus, simplicibus, hyalinis, c. 1,5 μ . crassis.

Hab. in foliis vivis *Baccharidis* sp., Sao Leopoldo Rio Grande do Sul, Brasilia.

3. **Dimeriella uncinata** Theiss., Broteria (1910) pag. 21. — Maculis 3433

epiphyllis, nigerrimis, opacis, 2-4 mm. diam. vel confluentibus; peritheciis globosis, atris, ubique sparsis, contextu fuligineo parenchymatico, 80-110 μ . diam., circum circa setulis brevibus fortiter uncinato-recurvatis, lacte fuscis, basi nigrescenti suffultis, 14-18 μ . altis (extensis 24-28 μ . longis) 3-4 μ . cr., obsitis; ascis ellipsoideo-cylindricis, 18-26 \times 5-6; sporidiis brunneolis, distichis, 1-septatis, 6-7 \times 2-2,5, cellulis subæqualibus.

Hab. in foliis Cestri lanuginosi epiphylla, Sao Leopoldo, Rio Grande do Sul Brasiliæ.

Sect. 4. Phæodidymæ.

DIMERIUM Sacc. et Syd. — Syll. XVI p. 410, XVII p. 537.

1. **Dimerium elegans** Syd., Ann. Mycol. VII (1909) p. 174. — Epi- 3484
phyllum, plagulas orbiculares 1-3 mm. latas atras elevato-discoideas velutinas efformans; peritheciis 10-30 in quaque plagula dense aggregatis, sæpe concentrice dispositis, globosis, atris, nitidis, astomis, demum centro leniter collabescentibus, 200-275 μ . diam., basi hyphis mycelicis numerosissimis radiantibus atris, haud ramosis parce septatis, usque ad 350 μ . longis, 8-11 μ . crass. ubique cinctis; ascis clavatis, apice rotundatis, basi in pedicellum attenuatis, 100-140 \times 18-22, 4-sporis; sporidiis monostichis, ellipsoideis, utrinque rotundatis, primo continuis hyalinis, dein medio 1-septatis, fuligineis, non constrictis, 21-30 \times 10-14; paraphysibus numerosis, hyalinis, crassiusculis (3-4 μ .).

Hab. in foliis Pasaniæ cuspidatæ Kura-mura Tosa Japoniæ (YOSHINAGA).

2. **Dimerium Autrani** (Henn.) Sacc. et Trott. *Dimerosporium Autrani* 3485
Henn. in Bull. Herb. Boiss. (1893) p. 116, t. V, f. 15. — Mycelio epiphylllo, crustaceo nigro, maculis rotundatis sæpe confluentibus e filis ramosis fuligineis constanti; peritheciis e mycelio erumpentibus, gregariis, globosis, atro-fuscis, rugulosis, usque ad 90 μ . diam.; ascis obovoideis, hyalinis, subsessilibus, octosporis, 30-42 \times 24-28; sporidiis distichis, ellipsoideis v. subclavatis, medio 1-septatis, leviter constrictis, utrinque obtusis, subfuscis, 17-21 \times 7-9.

Hab. in foliis vivis Canthii Schimperiani pr. Ghinda in Erythraea Afr.

3. **Dimerium crustaceum** (Theiss.) Sacc. et Trott., *Dimerosporium* 3486
crustaceum Theiss., Broteria (1910) p. 20. — Maculis nigris, ve-

lutinis, minutis, 1-2 mm. diam. in epiphyllis dispersis, membranaeo-crustaceis, coherentibus, ex hyphis densissime contextis, brunneis flexuosis, septatis, 3-4 μ . cr., ramosis formatis; hypharum articulis sæpius pseudopodia alterna, flaccide pendula, ramuliformia, oblonga, stipitata 6-8 \approx 2,5-3, passim perithecia nova generantia emittentibus; peritheciis parenchymaticis rhomboideo-cellulosis opacis e globoso subpiriformibus, nudis, 70-90 μ . diam., hyphis subiculi cinctis; ascis numerosis, primitus globosis 25-30 μ . diam., dein elliptico-extensis, 35-42 \approx 8-9; sporidiis conglobatis, 1-septatis, cellulis subinaequalibus, demum fusciscentibus 10-12 \approx 4-5.

Hab. in foliis Rubiaceæ cujusdam, Sao Leopoldo Rio Grande do Sul Brasilæ.

4. *Dimerium radio-fissile* Saccardo, Fungi aliquot africani, Bol. Soc. Broteriana v. XXI (1904-1905) pag. 4. — Peritheciis plerumque epiphyllis in soros perexiguos subcirculares, 400-600 μ . diam., junctis, globulosis, astomis, nigris glabris membranaceis, 90-120 μ . diam., mox vertice irregulariter dehiscentibus et sub pressione statim in lacinias numerosas radiatim fissis et tunc usque ad 200-220 μ . dilatatis; ascis e globoso ovoideis, basi obtuse apiculatis, 30-45 \approx 25-30, octosporis, paraphysibus filiformibus densis, hyalinis obvallatis; sporidiis didymis, constrictis, 18-21 \approx 8-11, utrinque rotundatis, maturis fuligineo-olivaceis, plerumque 2-guttatis; subiculo sub soris effuso sed non excedente, ex hyphis fuligineis dense reticulatis et hyphopodiis clavulatis formato.

Hab. in foliis adhuc vivis (habitu fere Colei) in ins. S. Thomé Africæ (A. MOLLER). — Peritheciis contextu subprosenchymatico, fuligineo mox sub levi pressione radiatim fisso et subiculo ad soros limitato species mox dignoscitur ab affinibus *Dim. Psilostomatis* et *Dim. Magnoliæ*.

5. *Dimerium Guinieri* R. Maire, Ann. Mycol. VI (1908) p. 144, fig. 1, tab. I, fig. 6. — Mycelio ex hyphis tenuibus, ramosis, dilute brunneis, 3-5 μ . diam., composito, sæpe hyphas Meliolæ strato plus minusve pseudoparenchymatico circumdante; peritheciis globosis vel ovoideis, 100-110 μ . diam., atro-brunneis, glabris, ostiolo papillato coronatis, contextu tenui, pseudoparenchymatico; ascis paraphysatis, oblongo-cylindræis, 43-52 \approx 7-8, octosporis; ascosporis distichis, ochraceo-brunneis, levibus, ovoideo-oblongis 12-13 \approx 4-5, medio septatis nec constrictis, loculo superiore conspicue crassiore.

Hab. in cæspitibus Meliolæ amphitrichæ ad folia Cascarieæ cujusdam prope Sao Paulo, Brasilæ.

6. *Dimerium incrustans* Spegazz., Fungi Paulist., Rev. Mus. La Plata 3439 t. XV (1908) p. 13. — Peritheciis pusillis globosis 80 μ . c. cr. membranaceis, contextu parenchymatico subopace fuligineo donatis, subiculo tenuissimo (hyphis 3-4 μ . cr.) fibroso hinc inde noduloso-parenchymatico olivaceo, hyphas Meliolarum v. Asterinarum arcte incrustans; ascis non v. vix obclavulatis 60 \approx 14 brevissime nodulosoque pedicellatis apice obtusis, octosporis, paraphysibus paucis filiformibus longioribus immixtis; sporidiis subclavulatis 13-14 \approx 5-6, primo hyalinis dein fuligineis, medio septatis non v. vix constrictis, loculo supero obtuso infero conoideo subacutiore.

Hab. in subiculo Asterinæ cujusdam prope Ipiranga Brasiliæ (USTERI).

7. *Dimerium leptosporum* Spegazz., Fungi Paulist., Rev. Mus. La Plata t. XV, pag. 14. — Subiculo submucedineo parum manifeste; peritheciis globosis astomis, glabris, parce gregariis, membranaceis, contextu parenchymatico olivaceo; ascis basi brevissime pedicellatis e cylindraceo obclavulatis, apophysatis, 40-50 \approx 12-15, octosporis; sporidiis fuligineis, distichis clavulatis 15-20 \approx 4-5 ad septum leniter excentricum vix constrictis, loculo infero acutiore.

Hab. in subiculo Asterinarum epiphyllarum ad folia coriacea circa Sao Paulo Brasiliæ (USTERI).

8. *Dimerium Gymnosporæ* (P. Henn.) Syd. Ann. Myc. VII (1909) 3441 p. 546. — Ita vocandum *Dimerosporium Gymnosporiæ* P. Henn. — Syll. XVI, p. 408.
9. *Dimerium* (*Dimerosporiopsis*) *Englerianum* (P. Henn.) Sacc. — Syll. XVII, p. 537. — Teste cl. v. Höhnelt (Fragm. z. Mykol. VIII, p. 5-7) esset genuina species *Coleroæ* ipseque auctor addit *Antennariam* Link (= *Antennularia* Reichenb.), *Gibberam* Fries et *Coleroam* Rabenh. unum idemque genus sistere, de qua æquatione vere mirabili liceat interdum dubitare.

ALINA Raciborski, Bull. Ac. Sc. Cracovie (1909) pag. 374 (Etym. prob. e nom. proprio). — Parasitica; mycelio endogeno hyalino, haustoriis prædito. Hyphæ superficiales radiantes maculas nigras formantes, hyphopodiis carentes, hinc inde cellulas phialiformes conidio fusoido terminatas ferentes. Perithecia globosa, breviter pedicellata, astoma, setulis circumdata, contextu unistratoso, 4-11 ascos globoso-ovoideos, octosporos includentia. Sporidia bicellularia, brunnea. — Generi *Balladynæ* affinis sed vere parasitica, perithecia oligoasca etc.

1. **Alina Jasmini** Raciborski, Bull. Ac. Sc. Cracovia (1909) p. 375. — 3443
 Characteres generis. Amphigena; hyphis superfic. 4-6 μ . cr.; conidiis fusoides 40-46 \times 6-8, crasse tunicatis, 2-3-septatis; peritheciis 40-50 μ . diam.; pedicellis 5-6 \times 3-4; ascis ovoideis 21-25 \times 14-17, octosporis; sporidiis ovoideis, 12-15 \times 4-5, bicellularibus, cellulis inaequalibus, brunneis.

Hab in foliis *Jasmini* sp. pr. Buitenzorg ins. Javæ.

BALLADYNA Rac. — Syll. XVI p. 411.

1. **Balladyna Medinillæ** Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 373. 3444
 — Amphigena, effusa, nigra, subrotunda, interdum confluens; hyphis brunneo-nigricantibus, copiosis, irregulariter ramosis, 9 μ . cr., hyphopodiis, semiglobosis, 8-12 μ . long., præditis; peritheciis asurgentibus, stipitatis, subglobosis, 40-48 μ . diam.; stipitibus 24-40 \times 7-9; peritheciis stratis quaternis, exterioribus brunneis, demum secedentibus et stratum interius diaphanum relinquantibus; asco unico in quoque perithecio, octosporo aparaphysato; sporidiis diu hyalinis, demum pallide brunneis, tenuiter tunicatis, levibus, bicellularibus, medio constrictis 25-30 \times 13-15, utrinque rotundatis.

Hab. in foliis *Medinillæ* pr. Salak ins. Javæ.

2. **Balladyna amazonica** v. Höhn. Fragm. Myk. IX, p. 7 (1909). — 3445
 Superficialis epiphylla, nigricans, 1,5 mm. long., hyphis radiantibus 2-3 μ . cr., olivaceo-fuscis, ramosis, adpressis; peritheciis sessilibus v. breviter pedicellatis, confertis, numerosis 50-60 \times 36, ovoideis, grosse cellulosis, monoascis; ascis ovoideis 32-40 \times 24-26, octosporis; sporidiis dilute olivaceo-flavidis, 2-cellularibus, 18-21 \times 8,5, cellula super. sæpius latiore et brevior.

Hab. in foliis *Cecropiæ* sp. præcipue ad nervos crassiores, *Jurná Amaz. Brasiliæ*, socia *Auerswaldia Cecropiæ* (E. ULR). — Inter perithecia occurrunt, ut videtur, pycnidia subcylindræa 60 \times 25-28, apice sæpe lobulata.

PARODIELLA Speg. — Syll. I p. 717, IX p. 409, XI p. 260, XIV p. 469, XVI p. 412, XVII p. 541.

1. **Parodiella kwangensis** P. Henn., in Fl. du Bas- et Moy.-Congo, 3446
 in Ann. Mus. du Congo v. II, fasc. III (1908) p. 225. — Maculis rotundatis v. effusis, fuscis; peritheciis hypophyllis concentricè dispositis ovoideis, astomis, ferrugineo-atris 130-170 μ . cr., mycelio ferrugineo-fusco circumdatis, hyphis ramosis, septatis, 4-10 μ . c. cr., conidiis oblongo-clavatis v. subfusoides obtusis, 2-septatis

vix constrictis, ochraceis, 35-70 \times 13-18; ascis clavatis vertice rotundato-obtusis, tunicatis, 8-sporis, 90-110 \times 30-40; sporidiis ellipsoideis v. ovoideis, subdistichis v. oblique monostichis, flavo-brunneis, medio 1-septatis constrictis, 30-36 \times 14-17.

Hab. in foliis coriaceis arboris cujusdam, Kisantu Congo, Afr. (VANDERYST) una cum *Helminthosporio kwangensi* P. Henn.

MAIREELLA Syd. in litt. ad Maire R., Ann. Mycol. VI (1908) p. 146 (Etym. a prof. R. MAIRE, mycologo gallico eximio). — Perithecia astoma, globosa, superficialia, caespitosa, pseudostromate inserta, contextu pseudoparenchymatico, fusco. Asci elongati, octospori, aparaphysati (?); sporidia didyma brunnea. — Est *Parodiella* composita seu *Othia* perisporiaceæ.

1. **Maireella maculans** Syd., l. c. p. 146, fig. 2, tab. I, fig. 1, 3. — 3447
Acervulis peritheciarum 5-7 basi confluentium epiphyllis, centro maculæ rotundatæ, e pallescente brunneæ, 2-3 mm. diam., singulis insidentibus, 0,4-0,5 mm. diam.; peritheciis nigris, globosis, basi coalitis, astomis, rugulosis, interdum ad basim pilis nonnullis longiusculis, septatis, decumbentibus præditis, ceterum glabris, 150-200 μ . diam., contextu pseudo-parenchymatico, circa 40 μ . crasso; ascis oblongo-clavatis, octosporis, 50-75 \times 18-26; ascosporis distichis v. tristichis, oblongo-lanceolatis, medio septatis et constrictis, 19-25 \times 8-9, cellulis subæqualibus, episporio tenui, diu hyalino v. subhyalino, in spora matura dilute brunneo, minutissime verruculoso v. levi; paraphysisibus filiformibus, membrana gelificata; mycelio per contextum folii expanso.

Hab. in foliis vivis plantæ ignotæ, forsan Compositæ, Alto da Serra prope Sao Paulo Brasiliæ.

Sect. 5. Hyalophragmiæ.

ZUKALIA Sacc. — Syll. IX p. 431, XI p. 268, XIV p. 17, XVI p. 416, XVII p. 543.

1. **Zukalia Gymnopogonis** v. Keissl., Ann. Mycol. VII (1909) p. 291. 3448
— Epiphylla; maculis nullis v. folio vix pallescente; mycelio tenui, laxissimo, subiculum non formante, hyphis brunneis, septatis (cellulis oblongis, raro moniliformibus, quasi chlamydosporas simulantibus), subrectis, sparse fere rectangulariter ramosis, c. 6 μ . lat.; peritheciis magnis fere superficialibus, sparsis, (raro 2-3 sub-

confluentibus), globosis, astomis, nigris, c. 300-500 μ . diam.; ascis cylindraceutis, breviter stipitatis, tenuiter tunicatis, 8-sporis, paraphysatis, c. 50-55 \times 10; sporidiis subdistichis, subclavatis, hyalinis, eguttulatis, 2-septatis, ad septa non constrictis, c. 15 \times 5.

Hab. ad folia viva *Gymnopogonis scandentis*, in insula Samoa Upolu, in silvis primævis supra Utumapu (RECHINGER).

2. **Zukalia Usteri** Spegazz., Fungi Paulist., Rev. Mus. La Plata t. XV, 3449 p. 14. — Peritheciis nigris sparsis hypophyllis 100-200 μ . diam., villo occultis, globosis, glabris, astomis, membranaceis, contextu parenchymatico minuto, densoque olivaceo-fuligineo; subiculo non invento; ascis cylindraceutis apice subtruncato-rotundatis, basi breviter cuneato-pedicellatis, 70-80 \times 10, parce paraphysatis; sporidiis subclavulatis rectis v. leniter curvulis, 3-septatis ad septum medium tantum constrictis, hyalinis, loculo supremo obtusiore infimo acutiore, 16-18 \times 4.

Hab. in foliis coriaceis dorso albo-tomentosis, prope Ipiranga Brasilie (USTERI).

3. **Zukalia transiens** v. Höhn. Fragm. z. Mykol. XII (1910) p. 41. 3450 -- Peritheciis depresso-globosis, nigris, siccis leviter collabentibus, 200-250 μ . diam., subiculo tenuissimo albo circumdati, hyphis hyalinis, ramosis, inter se decussantibus 2-4 μ . cr., insidentibus, sparsis; conidiis in subiculo, triradiatis, dilute violaceo-brunneis, magnitudine variis, *triposporioides* interspersis; peritheciis carnosis, violaceo-brunneis, grosse cellulosi, cellulis 8-12 μ . diam., prope ostiolum rotundum paullo minoribus ad basim in subiculum sensim abeuntibus; ascis paraphysatis, fusoides-clavatis, tenuitunicatis, 80-100 \times 6, basi in stipitem 20 μ . long., crassum productis; sporidiis octonis cylindraceutis, leviter curvis, utrinque acutis, 42-76 \times 4, 9-13-septatis, non constrictis.

Hab. in foliis Fici sp. Ost-Usambara Africae (ZIMMERMANN).

4. **Zukalia parasitans** v. Höhn., Fragm. Mycol. VIII (1909) p. 22. — 3451 Hyphis parvis, recte excurrentibus, diaphane brunneis, septatis, 3 μ . cr., hyphopodiis nullis; peritheciis gregariis verticaliter ovoideo-oblongis, subinde breviter stipitatis, nigris, glabris, astomis, 70-100 altis, 46-60 μ . cr., ex cellulis castaneo-brunneis, 6-8 μ . lat., formati; ascis paraphysatis, paucis, crasse clavato-fusoides, apice obtusis, 28-41 \times 14-16, octosporis; sporidiis bi-triseriatis, oblongo-clavatis, hyalinis, basi acutulis, mucosae obvolutis, 3-4-cellularibus, non constrictis, 14-18 \times 3-3,5.

Hab. parasitica in crusta mycelica *Limacinula samoensis* ad folia *Fici elasticæ*, *Tjibodas insulæ Javæ*.

5. *Zukalia vagans* Spegazz., *Fungi Paulist.*, *Rev. Mus. La Plata* t. XV, 3452 pag. 14. — Peritheciis hinc inde laxè gregariis, ovatis v. ovato-depressis, minutis, per ætatem non callapsis, medio plus minusve umbonatis, ostiolatis, glabris, membranaceis, contextu parenchymatico minuto, parum distincto donatis, subiculo membranaceo-submucoso tenuissimo late matricem incrustante olivaceo, insidentibus; ascis obclavulatis apice subtruncatis basi brevissimo cuneato-pedicellatis $60-70 \approx 10-14$, octosporis; sporidiis hyalinis subellipsoideis utrinque acutiusculis, rotundatis, 3-septatis, ad septa leniter constrictis, $16-18 \approx 6-7$, rectis v. inequilateralibus.

Hab. in subiculo *Meliolarum* et *Asterinarum* ad folia viva *Elæagni reflexi* et aliarum arbuscularum in Horto botanico paulistano. Brasilia (USTERR). — var. *brachycarpa* Speg., l. c.: a typo differt peritheciis non umbonatis obsoleteque ostiolatis (an quandoque astomis?) per ætatem collabescentibus, ascis ellipsoideo-subclavulatis, $40-60 \approx 14-20$; sporidiis vix minoribus $14-18$, sæpius $16 \approx 4-6$. — In subiculo *Meliolæ* ejusdam ad folia *Coffeæ arabicæ* nec non *Spirææ cantoniensis*, in Horto botanico Paulistano, Brasilia (USTERR).

6. *Zukalia paraensis* P. Henn., in *Rehm Ascom. exsicc.* fasc. 42, 3453 n. 1800; *Ann. Mycol.* VI (1908) p. 490 (nomen nudum).

Hab. in pag. sup. foliorum *Anacardii occidentalis*, Pará Brasiliæ (C. F. BAKER). — *Zukalia dimerosporioides* (Speg.) Sacc. — *Syll.* IX, pag. 431 — teste v. Höhnelt esset species *Gibberellæ*; observandum tamen contextum ejus, sec. cl. Spegazzini, esse *atrofuliginæum* a *Gibberella* abhorrentem.

Sect. 4. Phaeophragmiæ.

PERISPORIUM Fr. — *Syll.* I p. 55, IX p. 412, XI p. 260, XVII p. 544.

1. *Perisporium macrocarpum* Saccardo, *Not. Myc.* VI, *Ann. Myc.* 3454 v. III (1905) p. 510. — Peritheciis gregariis v. hinc inde dense confertis, superficialibus, globosis vel leviter depressis, astomis, majusculis 1 mm. diam., carbonaceis, opace nigris, fragilibus, superficie denique minute foveolato-areolatis; contextu subcarbonaceo, atro, parum distincto; ascis? jam resorptis; sporidiis oblongo-

cylindraceutis 4-5-articulatis, 40 \approx 9-11, ad septa constrictis, articulis, initio subcuboideis, mox vero globulosis, 9-11 μ . diam., fuligineo-nigricantibus.

Hab. in disco atrato putrescente arboris (Piri?) in agro Tarvisino (Treviso) Ital. bor. Legi cum amico SPERGAZZINI multis ab hinc annis sed, ascis ignotis, descriptionem ejus prætermisi; tamen a generis ceteris speciebus omnino differt præsertim peritheciis majoribus areolatis sporidiis majoribus etc.

2. **Perisporium Armeniacæ** Hollós, Ann. Mus. Nac. Hung. IV (1906) 3455 p. 329, tab. VIII, fig. 2. — Peritheciis superficialibus, gregariis hemisphaericis, astomis, brunneo-nigris, glabris, nitidulis, 300-400 μ . diam.; ascis cylindraceutis, breve stipitatis, 4-8-sporis, 54-60 \approx 8-10; paraphysibus filiformibus, ramosis, hyalinis, septatis et guttulatis, compluribus locis incrassatis; sporidiis cylindraceutis, rectis v. curvulis, utrinque attenuatis, 3 septatis, ad septa valide constrictis, olivaceo-brunneis, 30-40 \approx 3-4, loculis facile secedentibus, segmentis terminalibus 9-12 \approx 3-4.

Hab. in putamine putrescente Armeniacæ vulgaris, Keskemét Hungariæ. — A *Perisp. funiculato* Preuss diversum.

MELIOLA Fr. — Syll. I p. 60, IX p. 413, XI p. 260, XIV p. 470, XVI p. 413, XVII p. 546.

1. **Meliola Thouiniæ** Earle, Bull. of the New York Bot. Gard. (1904) 3456 p. 308. — Epiphylla, pelliculas tenues nigras 3-6 mm. diam. sæpe effusas et indeterminatas formans; hyphis 7 μ . cr., septatis, articulis 12-16 μ . long.; hyphopodiis copiosis, alternis v. suboppositis, subcylindraceutis, 14-16 \approx 8-9, cellula basali 3-4 μ . long., superiori ellipsoidea obtusa; hyphopodiis mucronatis, copiosis, oppositis conoideis v. phialiformibus, obtusis, 20 \approx 7; setis parvis, 300-400 \approx 8, rectis, apice acutis, opacis; peritheciis copiosis, collabentibus, ostiolatis, minutis, 110-150 μ . diam. glabris, ex cellulis compactis 8 μ . diam. formatis; ascis ovoideis, breve stipitatis, 40-50 \approx 25, bi-trisporis; sporidiis 4-septatis, cylindraceutis, leviter constrictis, obtusis, atro-fuscis, 35-40 \approx 12-14.

Hab. in foliis Thouiniæ striatæ, Porto Rico (HELLER). — Affinis *M. stenospore* Wint.

2. **Meliola crucifera** Starb., Ascom. Schwed. Chaco-Cordill. Exp., 3457 Arkiv f. Bot. Bd. V (1905) pag. 7. — Maculis epiphyllis, rarius hypophyllis sine ordine sparsis, interdum confluentibus, vage orbiculariter et dendritice determinatis, 1-3 mm. diam., atris; my-

celio facillime secedente melioloideo, hyphis septatis, ramosis, 5-10 μ . latis, composito, hyphopodiis capitatis plerumque oppositis, cylindræis, cellula basilari discoidea, exteriore sæpe curvula; hyphopodiis mucronatis non visis; setis numerosis, etiam sed rarissime ex peritheciiis orientibus, erectis, rigidis, opacis, non septatis, sæpissime sursum quadrifurcatis, ramulis omnibus ad apicem iterum dichotome furcatis vel alternantibus binis indivisis, binis semel furcatis, interdum ramulis duobus vel tribus indivisis v. uno alterove furcato, omnibus acutatis, primo eleganter recurvatis, denique angulum rectum formantibus, 140-200 \times 8-12; ramulis primariis 7,5-15 \times 5, secundariis 4 \times 2; peritheciiis centrum maculæ versus plerumque confertis, primo globosis, mox, ut videtur, collapsis, verruculosi, 150-200 μ . diam.; ascis ovoideis, bisporis 63 \times 25, trisporis 76 \times 38; sporidiis 4-septatis, ad septa constrictis, utrinque rotundatis, fuliginæis, 38-45 \times 15-17; hyphopodiis capitatis 19-21 \times 9, cellula externa 12-15 μ . long.

Hab. in foliis vivis Melicocce lepidopetalæ, Asuncion, Paraguay (MALME). — A *M. furcata* cui affinis, setis et hyphopodiis plane divergit (Cfr. Gaillard, Le genre Meliola, Paris 1892, p. 107, Pl. XIX, fig. 4): etiam a *M. Sapindacearum* Speg. bene diversa secundum figuram apud Gaillard (Soc. myc. 1892, T. XV, fig. 3).

3. *Meliola Andiræ* Earle, Bull. of the New York Bot. Gard. (1904) 3458 pag. 303. — Epiphylla; maculas late effusas brunneas formans; hyphis longis parce septatis, 7 μ . cr., articulis 30-35 μ . long.; hyphopodiis capitatis, oppositis, anguste obovatis, 12-14 \times 8-10; hyphopodiis mucronatis, hinc inde dense confertis ampulliformibus, collo sæpe excentrico et curvo, 16-18 μ . longo, cellula basali brevissima, 2-3 μ .; setis sparsis, 200-250 \times 7, basi tuberculatis sursum subcuspidatis curvatisque; peritheciiis astomis, minutis, 150-200 μ . diam., glabris, demum collabentibus; ascis 2-4-sporis mox diffuis; sporidiis fuliginæis, 4-septatis, leviter constrictis, obtusis, subcompressis, 35-40 \times 9-12.

Hab. in foliis Andiræ inermis, Porto Rico (HELLER).

4. *Meliola Chamæcristæ* Earle, Bull. of the New York Bot. Gard. 3459 (1904) p. 304. — Amphigena et caulicola, effusa, pelliculas tenues nigras formans; hyphis læte fuscis, inæqualibus, undulatis, 7-8 μ . cr., cellulis 30-35 μ . longis; hyphopodiis capitatis alternis v. sparsis, irregularibus, subcylindricis, pro more curvatis et circinantibus, 16-25 \times 9-10; hyphopodiis mucronatis non visis; setis raris,

sparsis, 200-250 \approx 7, rectis obtuse tenuatis, apice pallidioribus; peritheciis copiosis, sparsis, globosis, minutis, 120-150 μ . diam., contextu tenui subpellucido extus cellulis prominulis 10-12 μ . diam., colliculoso; ascis ellipsoideis, plerumque 4-sporis; sporidiis 4-septatis, pallide fuligineis, cylindraceis, valde constrictis, obtusis, minutis, 30 \approx 10-11.

Hab. in foliis caulibusque Chamæcristæ glandulosæ, Porto Rico (HELLER). — Affinis *M. microspora*.

5. *Meliola Yerbæ* Speg., Hongos d. Yerba Mate in Ann. Mus. Nac. 3460 Buenos Aires t. XVII (1908) pag. 115. — Amphigena; plagulis suborbicularibus tenuibus arcte adhærentibus ambitu effuso-evanescentibus, atris, glabris, 4-8 mm. diam.; hyphopodiis clavulato-obpiriformibus, nodulosis, alternis, 2-3-cellularibus 25-30 \approx 15; peritheciis hypothallo scutiformi insidentibus, hyphis paucis uncinulatis, 80 \approx 5-6, cinctis, 200 μ . diam.; ascis mox diffiuis, ellipsoideis brevissime pedicellatis, 50-60 \approx 35-40, bi-trisporis; sporidiis rectis e latere vix compressulis, 40-50 \approx 16-22, utrinque rotundatis, 4-septatis, leviter constrictis, fuligineis, grosse 5-guttulatis.

Hab. ad folia viva Ilicis paraguayensis, Territorio Misiones Argentinae.

6. *Meliola Theobromæ* F. C. v. Faber, in Arbeit. K. Biol. Anst. Ber. 3461 lin, VII (1909) pag. 220. — Peritheciis superficialibus sphaericis, atris, levibus, glabris, 110-130 μ . diam., mycelio in foliorum superficie effuso nigro insertis, 110-130 μ . diam.; ascis obovato-ellipsoideis, 28 \approx 14, octosporis, aparaphysatis; sporidiis ovoideis, continuis, translucidis, 10 μ . longis.

Hab. in pag. super. foliorum Theobromæ Cacao, Camerun Afric. trop. — Crustas atras crassas format. Diagnosis incompleta. Si species jugiter hyalospora esset potius *Meliolopsis*.

7. *Meliola lanigera* Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) 3462 p. 327, cum icon. — Plagulis orbicularibus v. difformibus, sparsis 1-5 mm. diam., hypothallo submembranaceo facile a substrato sedecente constitutis, hyphis repentibus flexuosis 10-12 μ . cr., densissime intertextis hyphopodiis alternis, clavulatis, sublevibus 24 \approx 15 densis auctis, setulis rectis 250-400 \approx 10-12, opacis fuligineis vix apice integro subpellucidis ornatis; peritheciis globosis, grosse verrucosis nudis, 200-250 μ . diam.; ascis ellipsoideis brevissime crasseque pedicellatis 55-60 \approx 25-30 mox diffluentibus, bisporis; sporidiis subcylindraceis 30-40 \approx 10-14, 4-septatis ad septa constrictulis rectis v. leniter curvulis, loculis grosse 1-guttulatis, fuligineis.

Hab. ad folia viva *Lithrææ brasiliensis* in dumetis pr. Santa Ana Misiones, Rep. Argentina Amer. austr. (A. LLAMAS). — Ad apices setularum sæpius conidia fusoido-clavulata, 40-50 \times 7-10, 3-4 septulata olivacea inveniuntur.

8. *Meliola quercinopsis* Rehm — Syll. XVI, p. 1125, — var. *me- 3463*
galospora Rehm, Ascom. Exsicc. fasc. 46, n. 1899, Ann. Mycol. (1910) p. 303. — Hyphis 3 μ . cr.; conidiis fusoides, longe pedicellatis, 5-cellularibus, 20-40 \times 5-8; peritheciis glabris, setulis 200 \times 5-8, brunneis, simplicibus, septatis basi ornatis; ascis 90-100 \times 30, octosporis; sporidiis oblongo-clavatis, 35-40 \times 10-12, tristichis, brunneis, 5-locularibus, cellulis extimis minutis, 5-guttulatis.

Hab. in pagina sup. foliorum *Lithrææ brasiliensis*, Sao Leopoldo, Rio Grande do Sul Brasiliæ (THEISSEN).

9. *Meliola Mangiferæ* Earle, Bull. of the New York Bot. Gard (1904) 3464
 p. 307. — Amphigena, pelliculas nigras, dense velutinas orbiculares, 6-10 mm. diam., demum confluentes formans; mycelii hyphis copiosis intertextis, atro-fuscis 10 μ . cr., cellulis 25-30 μ . long.; hyphopodiis capitatis inæqualiter clavato-oblongis, alternis, 25 \times 12-14, cellula basali 6-7 μ . longa, cellula superiore cylindracea subflexuosa; hyphopodiis mucronatis raris subconicis, obtusis, sæpe flexis et irregularibus 25 μ . long.; setis copiosis 600-700 \times 11, opacis, sursum tenuatis et sæpe breviter 2-5-dentatis; peritheciis globosis, 200 μ . diam., extus colliculosis; ascis typice 2-sporis, evanescentibus; sporidiis 4-septatis, constrictis, crasse cylindraceis, atro-fuscis, 50-55 \times 18-22.

Hab. in foliis *Mangiferæ indicæ* in horto Castleton Jamaicae (EARLE) et Porto Rico (HELLER). — Peritheciis colliculi ex peculiaribus cellularum aggregationibus formantur.

10. *Meliola polytricha* Kalchbr. et Cke. — Syll. I, pag. 67. — var. 3465
flexuosiseta Spegazz., Fungi Paulist., Rev. Mus. La Plata t. XV, pag. 16. — A typo differt subiculo sat villosa, setulis dense flexuoso-subcircinatis aterrimis, opacis, basim et apicem versus attenuatis; sporidiis subcylindraceis 45 \times 18 \times 12, 4-septatis.

Hab. ad folia viva *Schini* cujusdam in Horto botanico paulistano, Brasilia (USTERI).

11. *Meliola glabriuscula* Spegazz., Fungi Paulist. Rev. Mus. La Plata 3466
 t. XV, p. 15. — Subiculo tenuissimo plagulas sæpius confluentes ac fere totum epiphyllum obtegentes efficiente; hyphis subopacis crassis 6-8 μ . cr., rectis sæpius oppositis ampulluliformibus et piriformibus magis numerosis commixtis nigris fere opacis, setulis

paucis circa singula perithecia radiantibus, molliusculis apice integris, 50-150 \times 6, pellucidis; peritheciis subverrucosis astomis nigris, 150-250 μ . diam., semper glaberrimis; ascis ellipsoideis 45-60 \times 20-30, 2-4-sporis, breviter crasseque pedicellatis; sporidiis subcylindræis utrinque obtuse rotundatis, 5-locularibus, ad septa leniter constrictis, levibus, subopacis fuliginæis, rectis v. leniter subcurvulis e latere sat compressis, 35-40 \times 16-17 \times 12.

Hab. ad folia viva valde coriacea nitidissima (*Photiniæ*?), Agua branca, Isolamento prope Sao Paulo Brasiliæ (USTERI). — Species *Meliolæ brasiliensi* Speg. peraffinis sed glabritie, hypothallis microthyriiformibus deficientibus setulisque mycelialibus sat distinctis dignoscitur.

12. *Meliola valdiviensis* Speg., Fungi Chilenses (1910) p. 26, cum 3467 icon. — Subiculo orbiculari tenuiter membranaceo calvo, hyphis oppositè ramosis hyphopodiis oppositis v. alternis obovatis gibbosis v. sublobulatis; peritheciis globosis in quaque macula 3-8 insidentibus, 200-300 μ . diam., non collabescentibus; ascis bisporis 60 \times 34; sporidiis obtusis ellipsoideis, 4-septatis e latere non v. vix compressis, 48-52 \times 20.

Hab. copiose in foliis *Eugeniæ* cujusdam, Bahia de Corral Chile Amer. austr.

13. *Meliola Helleri* Earle, Bull. of the New York Bot. Gard (1904) 3468 p. 307. — Amphigena, pelliculas tenues subindefinitas nigras, 3-6 mm. diam. formans, sæpe plus minus confluens; mycelio intertexto pallide fusco, hyphis 7 μ . cr., cellulis 15-18 μ . long., hyphopodiis capitatis alternis v. unilateralibus, regularibus, oblongis, 16-18 \times 8, cellula basali curta, 5 μ ., superiori cylindræa; hyphopodiis mucronatis parvis, oppositis v. sparsis, subconicis v. ampulliformibus, sæpe irregularibus, truncatis, 18-20 μ . long.; setis parvis 350-450 \times 8, rectis, sursum tenuatis, apice breviter bifidis v. acute 2-pluridentatis; peritheciis globosis 150-200 μ . glabris, ex cellulis 8-10 μ . diam. formatis; ascis evanidis; sporidiis 4-septatis, atro-fuscis, cylindræis, fortiter constrictis, obtusis, 35-40 \times 11-13.

Hab. in foliis plantæ arboreæ cujusdam forte *Myrtaceæ*, Porto Rico (HELLER).

14. *Meliola falcatiseta* Speg., An. Mus. Nac. Buenos Aires t. XIX 3469 (1909) p. 327. — Plagulis sæpius epiphyllis 0,5-2,5 mm. diam., orbicularibus subcrustaceis arcte matrici adnatis, grosse denseque villosolanatis, nigris; hyphis mycelialibus 10-12 μ . cr. subopace fuliginæis, hyphopodiis 20 \times 15, creberrimis ornatis, setulis erectis

arcuatis acutis 250-500 \approx 10-12, subopacis 1-3-septatis apice acutis-simis atque subpellucidis arcuatis; peritheciis udis globulosis villosis absconditis papillulosis, 120-150 μ . diam., siccis corrugato-collabescens glabris atris, contextu submembranaceo grosse parenchymatico atro donatis; ascis paucis ellipsoideis 60 \approx 30-35 brevissime crasseque pedicellatis, aparaphysatis; sporidiis cylindratis 44-48 \approx 14-16, rectis v. leniter curvulis, utrinque obtusis, 4-septatis ad septa coarctatulis, oculis sæpius grosse guttulis, fuliginis.

Hab. ad folia viva *Moyæ ferocis* (e *Celastraceis*) Saucelito, Salta Rep. Argentina, Amer. austr.

15. *Meliola zig-zag* Berk. — Syll. I p. 67 — var. *discreta* Starb., 3470
 Ascom. Schwed. Chaco-Cordill. Exp., Arkiv. f. Bot. Bd. V (1905) pag. 7. — Peritheciis discretis siccitate collapsis, setis rarissime septatis, leniter undulatis, fere plane, acumine excepto, impellucidis, acutatis, rarissime obtusis, 150-250 \approx 8-10; ascis 51 \approx 32; sporidiis 44-48 \approx 15-18; conidiis nullis.

Hab. in foliis *Cinnamomi* (?), Rio Grande do Sul, Brasilia (MALME). — Conidiis nullis, situ et forma peritheciolorum differt.

16. *Meliola heteroseta* v. Höhn., Fragm. Mycol. VIII (1909) p. 13. 3471
 Epiphylla, subrotunda, 6 mm. lata, tenuissima, adpressa; hyphis radiantibus digitato-ramosis, atro-violaceo-brunneis 12 μ . cr.; articulis 28 μ . long.; hyphopodiis unilateralibus v. alternis, bicellularibus, ovato-oblongis, 16-20 \approx 11-12; hyphopodiis phialiformibus paucis; setis copiosis, nigris, rigidis, opacis, biformibus: mycelialibus 180-220 \approx 8-10, furcatis, perithecialibus cuspidatis 450 \approx 12, supra 3-5 μ . cr.; peritheciis sparsis, globosis, dein profunde umbilicatis, grosse cellulosi, ostiolo indistincto; ascis 2-3-sporis, ellipsoideis, basi acutatis, 60-65 \approx 26-33, pseudoparaphysibus (ascis abortivis?) intermixtis 100 \approx 25; sporidiis parallelis atro-brunneis, oblongis, 5-cellularibus, ad septa valde constrictis, utrinque rotundatis, 44-52 \approx 18-22.

Hab. in foliis *Paratropiæ* in silvis Tijbodas Javæ.

17. *Meliola pectinata* v. Höhn., Fragm. Mycol. VIII (1909) p. 14. 3472
 — Tenuis, nigricans, rotunda v. oblonga, mm. aliquot lata; hyphis vinoso-brunneis, 8-10 μ . cr., septatis, articulis 24-28 μ . longis, sæpe opposito-ramosis, hyphopodiis copiosis, oppositis; hyphopodiis capitatis 20-24 \approx 13-16, bicellularibus, cell. inferiori brevi, superiori rotundato-ovoidea, medio poro minuto prædita; hyphopodiis phialiformibus 17-20 \approx 8-10, continuis; setis nigris, rigidulis, rectis, acutis; mycelii setis 260-420 \approx 12; peritheciis setis 250 μ . long.; peri-

theciis sparsis, globosis, nigris, grosse cellulosis, astomis, 260-300 μ . diam.; ascis ellipsoideis, bisporis, 80 \approx 36-40; sporidiis oblongo-ellipsoideis, utrinque rotundatis, 5-cellularibus, ad septa constrictis, 60 \approx 24, atro-brunneis, pellucidis.

Hab. in foliis vivis Paratropiæ sp., socia *Mel. heteroseta* in silvis Tijbodas Javæ. — *Meliolæ Montagnei* affinis.

18. **Meliola Compositarum** Earle, Bull. of the New York Bot. Gard. 3473 (1904) p. 306. — Epiphylla, pelliculas minutas, 1-2 mm. lat. nigras v. atro-brunneas, sparsas v. subconfluentes formans; hyphis 7 μ . cr., articulis 20-30 μ . longis; hyphopodiis capitatis alternis 25-30 μ . long., cellula basali 8 μ . longa, superiore inæqualiter lobata, 15-20 μ . lat., interdum elongata et 1-septata; hyphopodiis mucronatis oppositis ampulliformibus; setis nullis; peritheciis globosis, 200 μ . diam., apice appendiculis rigidis 6-12 coronatis, appendiculis 80-100 \approx 20 pallidis, apice obtuso abrupte uncinato et saturatiore; ascis sæpius bisporis, mox evanidis; sporidiis cylindraceis v. anguste ellipsoideis, fuligineis, 4-septatis, constrictis obtusis, 45 \approx 14-16.

Hab. in foliis Willughbææ sp. et Eupatorii sp. Porto Rico et Jamaica (HELLER et EARLE) et Compositæ sp. in Brasilia (ULE).

19. **Meliola compacta** Earle, Bull. of the New York Bot. Gard. (1904) 3474 p. 306. — Amphigena, crustulas compactas, nigras 1-2 mm. latas formans; hyphis atro-fuscis 7 μ . cr., dense confertis et agglutinatis; setis mycelii nullis; hyphopodiis capitatis numerosis, crebris, 18 μ . longis, cellula basali 8 μ . longa, superiore globosa 10 μ . diam.; hyphopodiis mucronatis non visis; setis peritheci sparsis 70-100 \approx 6, obtusis, sæpe abrupte 20 μ . infra apicem curvatis, sursum subhyalinis; peritheciis globosis 200-225 μ . diam.; ascis ellipsoideis 4-sporis; sporidiis cylindraceis, compressis, obtusis, 4-septatis, constrictis, atro-fuscis, 40-45 \approx 14 \approx 10.

Hab. in foliis Crossopetali pallentis, Porto Rico (HELLER).

20. **Meliola Usteriana** Rehm, Ann. Mycol. VII (1909) p. 529, Ascom. 3475 Exsicc. fasc. 45, n. 1875. — Mycelio plerumque epiphylo, primitus maculas orbiculares, tenuissimas, arachnoideas, fusco nigrescentes, 1-4 mm. lat. formante, dein totum folium obtegente et nigro-viridulo-decolorante; hyphis mycelii plerumque curvatis, ramosis, septatis, subfuscis, 4-5 μ . lat.; hyphopodiis plerumque alternantibus, 2-cellularibus, cellula superiori subglobosa, inferiore

brevissima, 12-14 \times 8-10, creberrimis; hyphopodiis mucronatis oppositis, pallidioribus 15 \times 5; setis nullis; peritheciis primitus in centro macularum 5-8 arcte congregatis, in mycelio effuso plane dispersis, sessilibus, globulosis, glabris, atris, astomis, e cellulis magnis parenchymatice contextis, cellulis imprimis ad basim conoideis prominentibus, 150-180, siccis umbilicatis verruculosisque; ascis ellipsoideis 30-40 \times 20, 2-4-sporis; sporidiis oblongis, obtusis, 4-septatis, ad septa subconstrictis, fuscis, cellulis apicalibus 8 μ . longis, inde 3 mediis brevioribus, 30-33 \times 12-14.

Hab. ad folia Cordiæ, Avenida Paulista, Sao Paulo Brasiliæ (USTERI). — *Mel. conglomeratæ* et *arachnoideæ* affinis, sporis minoribus differt. Diagnosis hujus speciei, ab ipso Rehmio data in Ann. Mycol. (1907) p. 523, satis differt.

21. *Meliola Hyptidis* Syd., Ann. Mycol. VIII (1910) p. 36. — Mycelio epiphylllo, laxissimo ex hyphis repentibus, varie ramosis fuscis septatis 4-5 μ . crassis hyphopodia alternantia pedicellata ovata vel ovato-globosa 8-10 μ . longa, gerentibus composito; setulis mycelii erectis, rectis, septatis, simplicibus, fuscis, usque 250 μ . longis, 4-6 μ . latis; peritheciis globosis, 85-120 μ . diam., tuberculatis; ascis numerosis, oblongatis, 35-50 \times 20-30, 2-4-sporis; sporidiis oblongis, utrinque rotundatis, 4-septatis, constrictis, olivaceo-brunneis, 26-32 \times 9-11. 3476

Hab. in foliis Hyptidis suaveolentis, Lamao, Bataan prov. Luzon, Philipp. (E. D. MERRILL).

22. *Meliola caymanensis* Ell. et Ev., in Millspaugh, Public Field Columbian Mus. Bot. ser. II (1900) n. 1, p. 15, t. 49. — Epiphylla; mycelio maculas minutas, vix 1 mm. diam., subrotundas, nigras formante, ramoso-subreticulato; ramis 6-7 μ . diam.; hyphopodiis capitatis globosis, subsessilibus, 8 μ . diam.; hyphopodiis mucronatis ampulliformibus sursum cylindraceo-productis, 7-8 μ . long., non copiosis; peritheciis 200-250 μ . diam., collabescentibus, 2-6 in quaque macula mycelica; ascis obovatis, subsessilibus, 75-85 \times 20-25, bi-quadrifidis; sporidiis subfasciculatis, oblongo-cylindraceis, 4-septatis, leviter constrictis, 25-30 \times 11-13. 3477

Hab. in foliis Pharbitis catharticæ in insula Grand Cayman Antillarum.

23. *Meliola Psychotriæ* Earle, Bull. of the New York Bot. Gard. (1904) p. 308. — Amphigena, sæpius epiphylla, pelliculas orbiculares 1-3 mm. diam. formans; mycelio copioso, hyphis fuscis, 7-8 μ . cr., cellulis 25-35 μ . longis; hyphopodiis capitatis alternis, 3478

mycelio valde adpressis, $25 \approx 10-11$, cellula basali 7-8 μ . longa; hyphopodiis mucronatis oppositis, 16-20 μ . long., subconicis, sæpe curvis apice truncatis; setis erectis, 250-300 ≈ 8 , frequentibus, sursum obtuse tenuatis et pallidioribus; peritheciis minutis, 125-150 μ . diam., subcollabentibus, ex cellulis irregularibus 7-8 μ . diam., conflatis; ascis ellipsoideis, bisporis; sporidiis 4-septato-constrictis, ellipsoideis, pallide fuscis, utrinque obtuse tenuatis, $35 \approx 13-14$.

Hab. in foliis Psychotriæ sp. et Erithelis fruticosæ Porto Rico (HELLER). — *M. ambigua* affinis.

24. *Meliola longiseta* v. Höhnelt, Fragm. z. Mykol. III, Sitzb. k. Ak. 3479 d. Wissensch. Wien Bd. CXVI, Abt. I (1907) p. 100. — Mycelio hypophyllo, tenuissimo, laxo, 1 cm. diam., subrotundo; hyphis tortuosis, atro-vinosis, 8 μ . diam.; hyphopodiis 2-3-cellularibus alternis, breve capitatis 28 ≈ 12 , cellula superiori ovoideo-globosa, varie verrucosa; hyphopodiis mucronatis nullis; setis sparsis atris, opacis, rigidis 800-1000 $\approx 10-16$; peritheciis sparsis, globosis, verrucosis, 200 μ . diam., ascis 2-3-sporis, ovoideis, tenue tunicatis, 50 ≈ 20 ; sporidiis æqualiter 5-locularibus, atro-brunneis, oblongo-ellipsoideis, ad septa leviter constrictis, 40-44 ≈ 18 .

Hab. in foliis Psychotriæ sp. in insula Samoa (Doct. RECHINGER).

25. *Meliola Alstoniæ* Koord., Botan. Untersuch. (1907) pag. 170. — 3480 Maculis mycelii hypophyllis, rotundato-angulatis v. effuso-confluentibus, atris, setulosis, hyphis repentibus ramosissimis, brunneo-fuscis, pseudopodiis alternantibus ovoideos-clavatis, fuscis, apice obtusis, setulis indivisis, erectis, apice acuminatis, fusco-atris, 180 μ . longis, continuis; peritheciis sparsis globosis, apice rotundatis 127-135 μ . diam.; ascis 2-4-sporis clavatis, apice haud incrassatis, 80-90 $\approx 30-40$; ascosporis fuscis, oblongis, utrinque rotundatis, 2-4-septatis, 32-35 $\approx 14-14.5$ ad septa constrictulis; paraphysibus nullis; conidiis cylindraceo-clavatis, apice rotundatis, fumigatis, 30 ≈ 7 , circ. 9-septatis.

Hab. in foliis vivis Alstoniæ scholaris prope Sapuram prov. Kedu ins. Javæ (KOORDER).

26. *Meliola buddleyicola* P. Henn., Hedwigia XLIV (1905) p. 61. — 3481 Maculis mycelii epiphyllis, gregarie sparsis, rotundato-angulatis, atris, 1-2 mm. diam.; hyphis repentibus atro-fuscis, septatis, ramosis, pseudopodiis alternis, ovoideis, 1-septatis, 12-18 $\approx 7-8$ vel corniformibus, 15-22 $\approx 4-6$, atro-fuscis; peritheciis sparsis v. caespitosis, inermibus, subglobosis in sicco collabescentibus, atro-fu-

seis, membranaceo-cellulosis, pertusis, 100-160 μ . diam.; ascis ellipsoideis v. ovoideis 2-4-sporis; sporidiis cylindraceis utrinque obtusis, 4-septatis, constrictis, atro-fuscis, 25-32 \approx 7-10.

Hab. in foliis *Buddleayæ* sp. Tarapoto Amazoniæ Brasil. —

Mel. inermi cognata.

27. *Meliola funerea* Mac Alp., Descr. New Austral. Fungi, I, p. 104, 3482 t. X, f. 1-6 (Proceed. Linn. Soc. N. S. Wal. 1896). — Mycelio maculiformi plerumque epiphylllo, velutino, nigro, suborbiculari, sæpe cunfluente, valde conspicuo; hyphis ramoso-intricatis, 8 μ . cr., ex hyphis hyalinis delicatis adpressis, 2 μ . cr. orientibus, setulis fuliginis, rigidis, septatis, curvis, 11 μ . cr., apice acutatis; peritheciis globosis atro-purpureis, minute verrucosis, 310-350 μ . diam.; ascis pro more 4-sporis ovato-fusoideis 90 \approx 45; sporidiis allantoideis v. ellipsoideis, 3-septatis, ad septa constrictis, 54-62 \approx 18-20, e flavido brunneis.

Hab. in foliis *Grevilleæ* robustæ, N. South Wales Australiæ (MAIDEN).

28. *Meliola patella* Theiss., Broteria (1910) p. 26. — Plagis tenuibus, 3488
nigris, applanatis, 3-5 mm. diam., epiphyllis, discretis; hyphis radiantibus, stipatis, opposito-ramosis, 7-9 μ . cr.; hyphopodiis mucronatis oppositis, ampulliformibus in collum breve protractis; hyphopodiis capitatis magnis, distantibus, 23-32 \approx 17-20; setis nullis; peritheciis glabris, applanato-patellaribus, orbicularibus, margine acuto elevato, centro subumbonatis, numerosissimis, 120-180, contextu radiato microthyriaceo (non vero dimidiatis) poro centrali præditis; ascis ovoideis, 2-3-sporis; sporidiis rectis v. curvulis, 4-septatis, cellulis æqualibus, fuliginis, ad septa constrictis, utrinque rotundatis. (dimensionibus non indicatis).

Hab. in foliis *Sebastianiæ* sp. et *Schini* sp., Rio Grande do Sul Brasilæ.

29. *Meliola Thomasiana* Saccardo, Fungi aliquot africani, Bol. Soc. 3484
Broteriana v. XXI (1904-1905) p. 4. — Peritheciis in soros minutos, subcirculares, gregarios nigricantes, 1 mm. diam., junctis, globosis, astomis, 200 μ . diam., glabris, demum vertice irregulariter ruptis, setulis filiformibus, acutis, septulalis, atro-fuliginis, 280 \approx 8-9, basi parce cinctis; contextu e cellulis subglobosis, 11-14 μ . diam., fuliginis formato; subiculo repente ad soros limitato, filiformi, septato, ramoso, hyphopodiis capitatis, eximie 2-4-lobulatis, rufo-fuliginis copiosis prædito; ascis... jam resorptis; spo-

ridiis oblongo-cylindræis, utrinque rotundatis, 3-septatis, leviter constrictis, atro-fuligineis, $34-36 \approx 14-14,5$.

Hab. in foliis caulibusque vivis *Elatostematis angolensis* ex *Urticaceis*, in ins. S. Thomé, alt. 135 m. (A. MOLLER). — Affinis *M. gangliferæ*, a qua differt mycelio limitato et maculas effusas haud formante, sporidiis brevioribus etc.

30. *Meliola pennata* v. Höhn., *Fragm. Mykol.* VII (1909) p. 45. — 3485
Subrotunda, epiphylla, 3-6 mm. diam., confluens; hyphis sterilibus 8-10 μ . cr., arcte adnatis duplicato pennato-ramosis, ramis pro more oppositis; hyphopodiis alternis, $32-36 \approx 16$, capitulis oblongis, sæpe curvis; setis nigris, acute tenuatis, rigidis, basi 9-10 μ ., sursum 8 μ . cr.; setis perithecialibus 200-300 μ . long.; mycelialibus 360-650, copiosis; peritheciis astomis, apice nigris, verruculosus, globosis, non collabentibus, sparsis, 160-200 μ . diam.; ascis ovoideis; sporidiis oblongo-cylindræis, 4-septato-constrictis, atrobrunneis $50-55 \approx 23$, raro $24 \approx 18$.

Hab. in foliis coriaceis arboris cujusdam, Buitenz. ins. Javae.

31. *Meliola acamptinga* Spegazz., *Fungi Paulist., Rev. Mus. La Plata* 3486
t. XV (1908) p. 15. — Subiculo plagulas hypophyllas irregulariter orbiculari-angulosas laxissime reticulatas efficiente; hyphis subopacis crassis 6-8 μ . cr., rectis opposite ramosis dense hyphopodiatis, hyphopodiis circa perithecia ampulluli- v. spiniformibus, $20-25 \approx 6-7$, ambitu sæpius clavulatis obtusis, $20 \approx 9$, atris, setulis paucis circa perithecia tantum evolutis, filiformibus, $500-1500 \approx 10$ opacis, basi leniter incrassatulis; peritheciis 200-250 μ . cr., subverruculosus, astomis, membranaceis, grosse celluloso-parenchymaticis, nudis; ascis ellipsoideis $60 \approx 30$, brevissime pedicellatis, mox diffluentibus, bisporis; sporidiis subcylindræis, utrinque obtuse rotundatis, 5-locularibus ad septa leniter constrictis, levibus, subopace fuligineis e latere leviter compressis, $45-50 \approx 18 \approx 14$.

Hab. ad folia coriacea viva arboris ignotæ, Morca perto de Sao Paulo Brasiliæ (USTERI).

32. *Meliola Mitchellæ* Cooke — *Syll. I*, pag. 64. — var. *orthopus* 3487
Theiss. Broteria (1910) p. 34. — Maculis obsoletis, amphigenis, 1-3 mm. diam., hyphis gracilibus, brunneis, opposito-ramosis, 6-8 μ . cr., articulis elongatis; hyphopodiis capitatis alternis, brevissime stipitatis, cylindræis, $18-22 \approx 8-9$; setis acicularibus rectis; nigro-brunneis, $250-300 \approx 8-9$, apice 2-3 μ . cr., simplicibus; ascis bisporis, ovoideis, v. ellipsoideis; sporidiis 4-septatis, leniter constrictis, cellulis extimis hemisphæricis, $44-50 \approx 16-20$.

Hab. in foliis plantæ indet. socia *Seynesia paraguayensi*, Rio Grande do Sul Brasiliæ.

33. *Meliola dracenicola* Pat. et Har., Bull. Soc. Mycol. Fr. XXIV 3488 (1908) p. 14. — Maculis amphigenis, atris, facile dilabentibus, tomentosis; peritheciis globosis, atris 300 μ . circ. cr.; sporidiis rectis, cylindraceis, brunneis, utrinque obtusis, 4-septatis, constrictis, 46 \times 16; setulis mycelii erectis, atris, gracilibus, apice bis v. ter furcatis, ramulis suberectis v. patentibus, bi-tridentatis; hyphopodiis stipitatis, alternis, rotundatis, 20 μ . long.

Hab. in foliis *Dracænæ* spec., Brazzaville, Congo (A. CHEVALIER).

34. *Meliola circinans* Earle, Bull. of the New York Bot. Gard. (1904) 3489 p. 304. — Pelliculis irregularibus, velutinis, 5-10 mm. diam. v. late confluentibus, a folio facile secedentibus; mycelio copioso, atro-fusco, anastomotico-ramoso, non conglutinato, subinde noduloso, inæquali, hyphis 6-7 μ . cr., cellulis 16-20 μ . long.; hyphopodiis capitatis copiosis, cylindraceis, rectis, subinde lobatis 16-20 \times 8, cellula apicali subinde arcte inflexo-recurva (circinata) et tunc 16 μ . cr.; hyphopodiis mucronatis raris, ampulliformibus, 16-20 \times 6; setis mycelii copiosis nigris, rectis, cuspidatis, 400-600 \times 8-9; setis perithecialibus 6-8 v. pluribus atro-fuscis, curvatis, obtusulis, 130 \times 6; peritheciis globosis, minutis, 120-150 μ . diam. astomis; ascis mox evanidis sporidiis cylindraceis, utrinque apiculatis, pallide fuscis, diaphanis, 4-septatis, constrictis, 40-45 \times 12.

Hab. in foliis *Rhynchosporæ aureæ*, Porto Rico (HELLER) *Rhynch.* dodecandra et *Cyper* sp. in Florida (STURGIS, NASH) et *Cladii effusi*, Ocean Springs Miss. et Florida (TRACY). — Ab affini *Meliola Cyperi* differt sporidiis subapiculatis nec obtusis, hyphopodiis apice incurvo-circinatis etc.

35. *Meliola substenospora* v. Höhn., Stzb. k. Ak. d. Wiss. Wien 3490 CXVIII, Abt. I (1909) p. 317. — Subiculo sparso, nigro, crustaceo elliptico sæpius acute limitato 1-4 mm. longo, ex hyphis atro-brunneis dense reticulato-ramosis rigidulis septatis, 4-8 μ . cr.; hyphopodiis capitatis copiosis bicellularibus 24 \times 13-16, capitulo rotundo anguloso; hyphopodiis ampulliformibus parcis sæpe unilaterialibus patentibus 20 \times 8, obliquis, supra obtusis, setis mycelii tantum præsentibus usque ad 360 μ . long., copiosis, opaco-atris, acutis, subinde sursum pallidioribus, septatis, basi 12 μ . latis; hyphis conidiophoris nunc parcis nunc copiosissimis, rectis, diaphanis brunneis, deorsum 5-6-septatis, sursum continuis et subtorulosis

220-340 \times 5-6; peritheciis parvis v. copiosis, globosis, nigris astomis, 200 μ . lat., ascis mox diffuis, ovoideis bi-tri-sporis; sporidiis oblongo-cylindræis, utrinque leniter acutatis sed rotundatis, 5-cellularibus leniter constrictis.

Hab. in foliis adhuc vivis *Phragmitis* sp. in Horto Bot. Buitenzorg Javæ. — Affinis videtur *M. stenosporeæ*.

36. **Meliola Hercules** v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII 3491

Abt. I (1909) p. 316. — Subiculo epiphylo, sparso, rotundato v. oblongo 2-5 mm. lato, nigro, laxo ex hyphis atro-brunneis septatis solidiusculis dendritico-ramosis 8 μ . cr. formato; hyphopodiis capitatis bicellularibus 20-30 \times 15, capitulo inæqualiter globoso-anguloso; hyphopodiis ampulliformibus, parvis 15- \times 8, setis perithecialibus nullis, setis mycelicis copiosis 130-180 \times 10-12 sursum crassioribus opace atris, bi-tri-septatis, sursum usque ad 30 μ . cr., peritheciis paucis, globosis, nigris 160-200 μ . diam., ex cellulis hemisphæricis prominulis 16 μ . diam., orientibus; ascis ovoideis; sporidiis terno-quaternis, diaphane brunneis, 5-cellularibus ad septa constrictis, 42-44 \times 12-16.

Hab. in pagina sup. foliorum Graminis (*Anthistiria*?) prope Buitenzorg Javæ. — Affinis *M. clavulatae* et *M. Panici*.

Sect. 5. *Scolecosporeæ*.

OPHIOMELIOLA Starb. — Syll. XVI p. 416.

1. **Ophiomeliola Usteri** Spegazz., Fungi Paulist. Rev. Mus. La Plata 3492 (1908) t. XV, p. 17. — Peritheciis subiculo tenui membranaceo insidentibus, laxe gregariis, lageniformibus, glabris, atris, 100-120 μ . cr., superne in ostiolum crassiusculum subcylindræum 40-50 \times 35-45 apice subattenuatum denticulato-ostiolatum productis, contextu deorsum parenchymatico sursum prosenchymatico donatis; ascis utrinque attenuatis, apice rotundatis, basi crasse brevissimeque stipitatis 100-125 \times 25-30, octosporis; sporidiis rectis vel leniter sigmoideis, ad septa validiuscule constrictis, 70-80 \times 8-10, 14-16-septatis, olivaceis, loculis minute uniguttulatis.

Hab. ad folia viva *Eugeniæ* cujusdam, Ipiranga Moça Brasilia (USTERI).

PSEUDOMELIOLA Speg. — Syll. IX p. 938, XI p. 269, XVI p. 1127. 3493
1. ? **Pseudomeliola collapsa** Earle, Bull. of the New York Bot. Gard.

(1904) p. 309. — Mycelio hyphis tenuibus, agglutinatis, hyalinis, 2,5-3 μ . cr.; peritheciis dense aggregatis, integris, initio lenticularibus dein collabentibus, 100-120 μ . diam., conspicue ostiolatis, ex hyphis radiantibus, agglutinatis, dein crebro septatis, 4-5 μ . diam., formatis, ostiolo 8 μ . diam., margine appendicibus piliformibus, adpressis, radiantibus coronato; ascis obovatis, breviter stipitatis, 30-35 \times 12, aparaphysatis; sporidiis inordinatis, tereti-clavulatis, hyalinis, conspicue 3-guttatis, 12-14 \times 3.

Hab. parasitica in mycelio Meliolæ torulosæ et sp. ad folia Piperis peltati et Mesosphærii capitati, Porto Rico (HELLER). — Species quoad affinitates vere ambigua.

Sect. 8. Dictyosporæ.

CERATOCARPIA Roll. — Syll. XIV p. 474.

1. **Ceratocarpia Theobromæ** F. C. v. Faber, in Arbeit. K. Biol. Anst. 3494 Berl. VII (1909) p. 220. — Peritheciis minutis, globosis, astomis, parenchymaticis, 105 μ . latis, olivaceo-fuscis; ascis subglobosis, ovatis, breve stipitatis 30-60 \times 20, aparaphysatis, octosporis; sporidiis oblongis, transverse 2-6-septatis, constrictisque, primo hyalinis, dein melleis, demum olivaceo-fuscis, sæpe guttatis, rostello recto v. curvo plus minus longo utrinque præditis, 15-25 \times 12 (rostris exceptis).

Hab. in foliis Theobromæ Cacao ubi crustas crassas format, Camerun Africæ trop. — Aphides simul aderant copiosi. Sporidia typica muriformia a v. Faber non describuntur; an ergo species hujus generis?

PLEOMELIOLA Sacc. — Syll. I p. 70, XIV p. 17, XVII p. 554.

1. **Pleomeliola Karissæ** Bacc., Funghi Eritrea, Ann. Bot. v. IV (1906) 3495 p. 273, tav. X, fig. 10. — Mycelio amphigeno, crustaceo, atro, facile secedente; peritheciis atris, globulosis superficialibus v. immersis, glabris, rotundatis, 175-200 μ . diam. non umbilicatis; ascis numerosis octosporis 80 \times 14, clavatis, aparaphysatis; sporidiis fusciculis, ovalibus vel ellipticis, oblique monostichis vel distichis, muriformibus, transverse quinqueseptatis, 31 \times 14.

Hab. in foliis Karissæ edulis ad scaturigines torrentis Mai-Amus pr. As-Nefas, Amasen Erythrææ (PAPP).

ZUKALIOPSIS Henn. — Syll. XVII p. 554.

1. **Zukaliopsis paulensis** Rehm, Ann. Mycol. V (1907) pag. 522. — 3496
 — Peritheciis in mycelio epiphyllis hypharum, ramosarum, remote septatarum, 4 μ . cr., dilute flavidularum in sicco olivaceo, tenuissimo, longe effuso dispersis, sessilibus, globulosis, poro haud pertusis, membranaceis, dilute nigris, 250-300 μ . diam., in sicco umbilicatis, glabris; ascis ovalibus, crasse tunicatis, 40-45 \times 20-30; 8-sporis; sporidiis oblongo-ellipsoideis, utrinque rotundatis, transverse 3-7-9-septatis, cellulis modo singulis semel longitudinaliter divisus, hyalinis, 25-30 \times 7-9, 3-stichis; paraphysibus vix distinguendis.

Hab. ad folia Davillæ? Sao Paulo, Brasilia (USTERI).

Trib. 5. Capnodieæ Sacc. ()***CAPNODIUM** Mont. — Syll. I p. 73, IX p. 438, XI p. 270, XIV p. 476, XVII p. 555.*I. Eu-Capnodium Sacc. Sporidia fenestrata.*

1. **Capnodium cistophilum** (Fr.) Maire Bull. Soc. bot. Fr. LVI (1909) 3497 [edit. 1911] p. CCLXVIII fig. 1. *Antennaria cistophila* Fr. System. mycol. III, p. 230. — Sacc. Syll. fung. I, p. 82. — Mycelio . . . Cfr. Syll. I. c. — Pycnidiiis versiformibus, oblongis, cylindratis corniformibus, lageniformibus, brunneis, levibus, 100-200 μ . long., sporulis I ord. brevis ellipsoideis, pro more 1-septato-constrictis, rarius irregulariter 3-septato-muriformibus, 10-12 \times 6-7; sporulis II ord. oblongo-ellipsoideis 1-4-septato-muriformibus 13-17 \times 7,5-8, e latere 5-7 μ . cr.; peritheciis subglobosis, ellipsoideis, cylindratis v. clavatis, isodiametrico-cellulosis, apice irregulariter dehiscentibus; ascis 8-sporis, paraphysatis, oblongo-clavatis, 40-50 \times 12; sporidiis distichis v. tristichis, oblongo-ellipsoideis, levibus, brunneis, 3-septatis, ad septum medium constrictis, addito plerumque septo longit. unico, 14-15 \times 5-6.

(*) Quomodo cl. G. ARNAUD (Ann. Ecol. nat. d' Agric. de Montpellier. IX (1910) p. 240), nullius momenti habito mycelio fumagineo deterrenti tam peculiari et tam perspicuo, censet tribum *Capnodiearum* delere et ejus elementa cum Sphaeriaceis fundere est res omnino stridens et prope incredibilis.

Hab. in ramis Cistorum e. g. *C. polymorphi* socio *Coccide Lecanodiaspide sardoa*, in Tunisia.

2. *Capnodium stellatum* Bernard, Bull. Dép. Agric. Ind. Néerl. XI 3498 (1907) p. 1, f. 1-24. — Pycnidiis (?) stellato-appendiculatis, appendiculis apice digitato-incisis præditis, magnitudine variis, matriçi arcte adpressis, non verticalibus, 0,2-0,5 mm. long.; peritheciis ex pycnidii parte superiori hinc inde generatis inæqualiter globulosis; ascis ellipsoideis, obtusis, subsessilibus $45-46 \times 23-24$; sporidiis hyalinis dein brunneis, ellipsoideis, $17-22 \times 11-14$, 3-4-septato-muriformibus, ad septa non v. vix constrictis.

Hab. in foliis Citri sp. in ins. Java. — Vix *Capnodium*; cum gen. *Actinomma* et *Atichia* comparandum.

3. *Capnodium minimum* Bubák, Bull. Herb. Boiss. 2 sér. VI (1906) 3499 p. 399. — Hyphis atro-olivaceis, crebro septatis, crasse tunicatis, 4-7 μ cr., varie flexis; peritheciis conicis v. phialiformibus, nigris, confertim aggregatis, $80-150 \times 45-70$, atro-castaneis, grosse cellulosis, rostellatis; ascis ovoideis, 55×27 , octosporis; sporidiis oblongo-cylindræis, utrinque rotundatis, $22-29 \times 9$, olivaceo-brunneis, 4-5-septatis et verticaliter incomplete 1-septatis, ad septa, præcipue medium, constrictis.

Hab. in foliis petiolisque *Potentillæ speciosæ* pr. Stirnido Montenegro.

4. *Capnodium Acokantheræ* Bacc., Funghi Eritrea, Ann. Bot. v. IV, 3500 (1906) p. 273, tab. X, fig. 3. — Mycelio atro, crustoso, epiphyllò et ramulos ambiente; hyphis repentibus, moniliformibus, interdum in articulos 17×10 secedentibus, conidia cladosporioidea uni-triseptata gerentibus; peritheciis corniculatis, simplicibus, 210 μ . altis, basi ventricosis, 72 μ . latis, ore setulis hyalinis, erecto-patentibus 17 μ . longis coronato; ascis obovatis sessilibus 50×20 ; sporidiis olivaceis 2-5-locularibus; loculis sæpe transverse vel longitudinaliter septatis, $13-17 \times 7$.

Hab. in foliis *Acokantheræ Dorfelsii* juxta rivulum are-scentem pr. Medrigien Erythrææ.

II. *Capnodina* Sacc. Sporidia hyalophragmia.

5. *Capnodium capsuliferum* Rehm, Ascom. exsicc. n. 1735 et Ann. 3501 Mycol. V (1907) p. 468. — Mycelio epiphyllò latissime extenso, pannoso, atro; hyphis primariis subcurvatis, septatis, subhyalinis, repentibus, simplicibus v. ramosis; secundariis exsurgentibus, re-

ctangulo- interdum stellato-ramosis, apice acutatis, fusco-aureis, 5-7 μ . cr., cellulis subrotundis, ad septa valde constrictis, vix guttulis, scabriusculis; hyphis fertilibus erectis, plerumque simplicibus, 50-150 μ . long., ex articulis oblongis, 20 \approx 10 fuscis compositis, ad septa non constrictis, apice peritheciium globosum, dein piriforme sursum angustato-truncatum, demum fimbriato-apertum, fuscum, glabrum, 30-50 \times 20-35 ferentibus; ascis clavatis, 35-40 \approx 18, octosporis; sporidiis oblongis, utrinque rotundatis, 3-septatis, rectis curvulisve, hyalinis, 18 \approx 5; paraphysibus non observatis.

Hab. ad folia Tillandsiæ in Horto bot. Sao Paulo Brasiliæ (NOACK). — Occurrunt in mycelio cellulae nonnullæ fusco-umbrinae, 12-15 μ . lat., conidia hyalina, oblonga, 1,5 \approx 1 includentes.

6. *Capnodium Usterii* Rehm, Ann. Mycol. V (1907) p. 521. — Mycelio primario epiphylo, crustam nigram tenuem ex hyphis conglutinatissimis - cellulis 10 \approx 4 - fusciculis compositam, late effusam formante, hyphis fuscis simplicibus secundi ordinis, cellulis longioribus, 4-5 μ . lat., demum in filamenta erecta, - 200 μ . long., ad basim c. 30 μ . lat., versus apicem acutata, prosenchymatice conglutinata abeuntibus, rarius simplicibus, septatis, obtusis, fuscis, subramosis, cellulis 15 \approx 9, guttulas 2 oleosas includentibus; filamentis erectis secundi ordinis, sæpe hyphis divergentibus subscabris, ad apicem sæpe hyphis hyalinis divergentibus; peritheciis in latere filamentorum plerumque singularibus vel ad apicem 2-3 coacervatis, 30-130 \approx 30-40, stipitatis, elliptico-ovalibus, ad apicem subobtusis, glabris, parenchymatico-fusco-contextis; ascis ellipticis 30-35 \approx 9-10, 8-sporis; sporidiis fusiformibus, 3-septatis, rectis, 12-14 \approx 3-3,5, hyalinis, distichis; paraphysibus?

Hab. in foliis Myrtaceæ, Sao Paulo Brasiliæ (USTERI). — Ex apice perithecorum hinc inde evadunt conidia globulosa, hyalina, 3 μ . lat. In mycelio conspicua conidia triposporioidea, quaque parte c. 90 \approx 10 e cellulis fusciculis 7-10 composita. *Capn. pelliculoso* affine sed distinctum.

III. Species dubiæ.

7. *Capnodium hirtum*? Spegazz., Fungi Paulist., Rev. Mus. La Plata t. XV, p. 17 (1908). — Subiculum tenuiter subcrustaceum membranaceum, dense velutino-hirsutum, nigrum; peritheciis dense constipatis polymorphis 150-500 \approx 50-70 cylindræis v. obclavatis, simplicibus v. ramosis, ubique hyphis brevibus patulis laxè adspersis,

15-25 \approx 3-5; contextu breviter prosenchymatico olivaceo fusco; ascis sporisque desideratis; (tamen ob perithecia hirtula species bene distincta videtur).

Hab. ad folia viva Myrtaceæ cujusdam, Ipiranga, Cambucy Brasilia (USTERT).

8. *Capnodium* ? *Casuarinæ* Mac Alp. Austral. Fungi Dec. I-II, p. 374, 3504 (Proceed. Linn. Soc. New S. Wal. 1902). — Crustas fuligineo-nigras, ramulos totos obducentes formans, non facile secedens; hyphis repentibus septatis, ramosis, fuligineis, firmis, crasse tunicatis; ceratopycnidiis flavido-olivaceis v. virentibus, valde elongatis, versiformibus, varie ramosis, curvis, hyphis brunneis obductis, modo basi inflatis et sursum tenuatis, modo æqualibus, ostiolo minuto apice dehiscentibus; sporulis minutis, ovoideis, hyalinis, 3 \approx 1.5.

Hab. in ramis ramulisque *Casuarinæ* torulosæ Richmond River N. S. W. Australiæ (BAKER).

LIMACINIA Neger — Syll. XIV p. 474, XVI p. 1127, XVII p. 556. — Sec. cl. MAIRE *Morfea* Roze (aptius *Morphea*) in Bull. Soc. bot. Fr. XIV (1867) p. 21, est eadem res ac *Limacinia*, sed auctor nec thecas nec sporas in conceptaculis globosis vidit, nec descripsit, hinc genus Rozeanum inter formas inferiores *Capnodii* vel *Limacinie* potius adnumerandum est.

1. *Limacinia spinigera* v. Höhnelt, Fragm. z. Mykol. III, in Sitzb. 3505 k. Ak. d. Wissensch. Wien Bd. CXVI, Abt. I (1907) p. 100. — Mycelio pelliculam tenuem, griseo-atram arcte adpressam formante; hyphis 4-6 μ . cr., brunneis, guttulatis, valde ramosis, rectis, processibus stellatis, triposporioideis, 4-5-cellularibus, usque ad 80 μ . long., interspersis; pycnidiis longe cylindræis 20 μ . cr., supra medium fusoides et 35 μ . cr.; sporulis minutis, oblongo-teretibus; peritheciis pro more verticaliter ovoideis, ostiolo 60 μ . lato apertis, setis brunneis 50-60 \approx 6, septatis, rectis brunneis cinctis, 80-140 μ . diam.; ascis crasse clavatis, 40-60 \approx 14-20, octosporis; sporidiis bi-triseriatis, 3-4-cellularibus, hyalinis, elongato-ellipsoideis, 15-20 \approx 5-6, utrinque leviter tenuatis, ad septa non constrictis.

Hab. in foliis vivis *Sterculiæ* populeæ in ins. Samoa (Doct. RECHINGER).

2. *Limacinia Helianthemi* R. Maire, Not. myc., Ann. Myc. vol. IV 3506 (1906) p. 331. — Epiphylla et epiclada, mycelio e floccis aterrimis contexto; hyphis articulatis, subtiliter verruculosus, brunneis; articulis facile secedentibus, sæpe Coniothecii ad instar congrega-

tis; pycnidiis longe conoideis, rectis vel curvulis, 150-300 \times 45-70; pycnosporis ovoideo-oblongis, utrinque rotundatis, levibus, brunneis, transverse 2-3-septatis, longitudinaliter uniseriatis vel rarissime biseriatis plus minusve septatis, 10-13 \times 6-7; peritheciis subglobois, subastomis vel apice ostiolo epapillato pertusis, nec non setis continuis, brevibus, atro-brunneis sparse vestitis, diam. 90-120 μ .; ascis octosporis, eparaphysatis, oblongis, circ. 28-32 \times 10-16; sporidiis distichis brunneis, levibus, oblongis, utrinque rotundatis, transverse 3-septatis, ad septa haud constrictis, 12-13 \times 5.

Hab. in *Helianthemum lavandulifolium*, *Cocco* quodam infestato, Oran Algeriæ.

3. *Limacinia Guajavæ* (Bern.) Sacc. et Trott., *Capnodium Guajavæ* 3507
Ch. Bernard, Bull. Dép. Agric. Ind. Néerland. XI (1907) p. 21, fig. 37-42. — Mycelio nigro filamentoso, epiphylo; ceratopycni-
diis corniformibus, sursum tenuatis, simplicibus v. trifurcatis, pedicellatis, sporulis minutissimis hyalinis; peritheciis conico-globulosis v. subpiriformibus, 70-120 μ . diam., sursum 3-6 setulis divergentibus, filiformibus brunneis, præditis; ascis ellipsoideis, obtusis, subsessilibus, 30 \times 20, plerumque octosporis; sporidiis parallele stipatis, fusiformibus, hyalinis, 5-locularibus, leviter constrictis, rectis v. curvulis, 16-20 \times 5.

Hab. in foliis *Psidii Guajavæ* in ins. Java. — Ab affini *L. setosa* (Zimm.) Sacc. differt peritheciis non perfecte globosis, sporidiis 5-locularibus non 4-locularibus etc.

LIMACINULA Sacc. — Syll. XVII p. 558 (ut subg.).

1. *Limacinula melioloides* (Pat.) Sacc. — Syll. XIV, p. 475 (*Lima-* 3508
cinia) — var. *eugeniicola* Spegazz, Fungi Paulist., Rev. Mus. La Plata t. XV, p. 16. — Subiculo submembranaceo fusco glabrescente; peritheciis hinc inde glomeratis ovato-ellipsoideis v. obclavatis sessilibus v. breviter pedicellatis obscure ostiolatis; ascis cylindræis aparaphysatis, 60 \times 14; sporidiis ellipsoideo-subclavulatis triseptatis, 17-20 \times 7-8, sæpe loculo medio supero septo verticali diviso, primo hyalinis dein olivaceis.

Hab. ad folia viva *Eugeniæ* cujusdam, Ipiranga Moça Brasilia (USTERI). — Species, ut videtur, in tropicis late diffusa et pluries descripta; huc forte ducenda *Apiosporium brasiliense* Noack, *Capnodium brasiliense* Puttm., *Limacinia Aurantii* P. Henn. etc.

2. *Limacinula Oleæ* (G. Arnaud) Sacc. et Trott. *Teichospora Oleæ* G. 3509
Arn. Ann. mycol. (1910) p. 472. — Mycelio typice epiphyto, ni-

gro, toruloso; peritheciis sphaeroideis, minutis 100-120 μ . diam., atris; externis erectis, sessilibus vel varie pedicellatis, tandem ostiolo rotundo superne dehiscentibus; ascis cylindraceo-ovoides, facile diffuis, plus minusve latis longisque, plerumque 50-60 μ . long., 8-sporis, aparaphysatis; sporidiis subdistichis, fuscis, ellipsoideis, transverse 3-septatis, loculis binis septo longitudinali divis, plerumque 15-17 \times 7-9.

Hab. ad ramos Oleæ europæe a *Lecanio Oleæ* vexatos in Gallia australi. — Cum gen. *Teichospora* typico, ad quod ducit cl. G. ARNAUD nil commune habet et toto habitu et biologia recedit. Forma sporidiorum a *Lim. meridionali* imprimis differt. — Præterea cl. G. Arnaud in Ann. Ecole nat. d'Agricult. de Montpell. IX (1910) p. 240 c. ie., peculiari mycelio fumagineo nullius momenti habito, non dubitat *Limaciniam Citri* (Br. et Pass.) Sacc. — Syll XIV, p. 474 — ad *Pleosphaerium* ducere et *Pl. Citri* (Br. et Pass.) Arn. vocare, quod mihi omnino absonum et repugnans videtur. Ut ejus synonyma censet *Limaciniam Camelliae* (Catt.) et forte *L. Penzigi* Sacc. et tamquam formas conidiophoras: *Fumago Citri* Pers., *Dematium monophyllum* Risso, *Capnodium Citri* Berk. et Desm., *Morfea Citri* Roze, *M. Hesperidis* Roze, *Apiosporium Citri* Br. et Pass.

3. **Limacinula meridionalis** (G. Arnaud) Sacc. et Trott. *Teichospora* 3510
meridionalis G. Arn., in Ann. mycol. (1910) p. 471. — Mycelio typice epiphyto, nigro, toruloso; peritheciis atris, sphaeroideis, minutis, 100-150 μ . lat., externis erectis, sessilibus v. varie pedicellatis, tandem ostiolo rotundo superne dehiscentibus; ascis teretio-ovoides, facile diffuis, plus minus latis longisve, plerumque 50-60 μ . long., 8-sporis, aparaphysatis; sporidiis subdistichis, fuscis, clavato-ovoides, medio constrictis, transverse 3-septatis, loculis binis septo longitudinali divis, plerumque 16-17 \times 7-8.

Hab. ad ramos Cisti monspeliensis a *Lecanodiaspide sardoa* vexati, Citri deliciosæ a *Lecanio Oleæ* et *Dactylopio* vexati, Quercus Suberis et Nerii Oleandri a *Lecaniis* vexatorum in Gallia australi. — Cum gen. *Teichospora* typico nil commune habet.

4. **Limacinula indica** (Ch. Bern.) Sacc. et Trott., *Capnodium indicum* 3511
 Ch. Bern. in Bull. Dép. Agric. Ind. Néerland., VI (1907) p. 44, fig. 18-29. — Mycelio brunneo, folia laxè investiente; hyphis copiose ramosis et septatis; ceratopycnidiis longe angustè am-pulliformibus, collo 80-100 μ . longo, parte cylindracea 120-200 \times

35-45 apice fimbriata; sporulis hyalinis ellipsoideis, continuis 5-6 \approx 2-2,5; peritheciis globulosis, 50-200 μ . diam., obtusis, subinde brevi-pauci-setulosis, inter ceratopycnidia nascentibus; ascis ignotis v. jam elapsis; sporidiis ellipsoideis utrinque rotundatis, 3-septatis, 28-33 \approx 15-20, loculis binis centralibus septo uno alterove longitr. divisus, guttulatis, dilute coloratis.

Hab. in pag. super. foliorum Kickxiæ elasticæ in ins. Java, socia *Lecanii* sp.

5. *Limacinula tenuis* (Earle) Sacc. et Trott., *Antennularia* ? *tenuis* 3512
Earle, Bull. N. York Bot. Gard. III (1905) p. 302. — Epiphylla; mycelio late effuso, pelliculas tenues olivaceo-brunneas formante; hyphis mycelii valde intertextis, delicatis, tenue tunicatis, subhyalinis, circ. 4 μ . diam., crebro septatis, articulis 12-18 μ . longis, mycelio hinc inde catenulas toruloideas ex cellulis 8-10 \approx 5-6 constante formante; peritheciis copiosis, sparsis mycelio insertis, nigris, globosis, astomis, 200 μ . diam.; ascis ellipsoideis, tenuiter tunicatis, 80 \approx 25, copiose filiformi-paraphysatis; sporidiis inordinatis ellipsoideis, obtusis, hyalinis, 4-8-septatis, 30 \approx 12, septo verticali divisus.

Hab. in foliis Musæ sp., rarius Ingæ veræ, Porto Rico (HELLER). — Conidia triposporioidea adsunt.

6. *Limacinula samoënsis* v. Höhnelt, Fragm. z. Mykol. III in Sitzb. 3513
k. Ak. d. Wissensch. Wien Bd. CXVI, Abt. I (1907) p. 101. — Mycelio pannoso, late effuso, facile secedente, brunneo-nigricante; hyphis basalibus dense ramosis, 3,5-5 μ . cr., levibus; hyphis primariis rigidulis, granulosis, parce ramosis, 7-9 μ . cr., in articulos 12-19 μ . longos septatis; hyphis antennarioideis torulosus, ex articulis doliiformibus, 16 \approx 8 formatis; peritheciis rotundatis 260 μ . diam., in hyphis antennarioideis sessilibus, nigris, supra umbilicatis, glabris; ascis copiosis, crasse clavatis 110 \approx 24, subapaparysatis, octosporis; sporidiis distichis, versiformibus oblongis 5-6-septato-muriformibus, hyalinis, serius diaphane brunneolis, 28-36 \approx 9-14.

Hab. in foliis coriaceis in ins. Samoa (Doct. RECHINGER) et in foliis Fici elasticæ in Java (v. HÖHNEL). — Conidia triposporioidea quoque adsunt: radiis 3-6-cellularibus, 35-50 \approx 6. Cfr. etiam v. Höhn. Fragm. z. Mykol. VIII, p. 37.

7. *Limacinula roseospora* v. Höhn. Fragm. z. Mykol. XII (1909) 3514
pag. 37. — Conceptaculis hypophyllis, gregariis v. sparsis, facile secedentibus, siccis disciformibus, umbilicatis, 200-300 \approx 120-160,

subcarnosis, brunneo-atris, pluristratoso-cellulosis, basi in halonem circularem dilatatis; peritheciis inclusis, depresso-globosis, carnosulis, 120-140, μ . alt., 160-180 μ . cr., ostiolo minuto, impresso; ascis aparaphysatis late clavatis, sessilibus, 85-100 \approx 20-28, tenuissime tunicatis, octosporis; sporidiis parallele polystichis, curvulis, cylindraceo-fusoideis, roseis, utrinque obtusulis, 13-15-septatis, ad septa vix constrictis loculo uno alterove longitrorsum diviso, 56-80 \approx 7-8.

Hab. in foliis coriaceis vivis arboris cujusdam, Sao Leopoldo Brasiliæ (P. THEISSEN in herb. REHM). — Mycelio capnodiaceo deficiente a typo Limacinie et Limacinulæ abhorret.

PARACAPNODIUM Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 325 (Etym. *para* prope, h. e. *Capnodio* affine). — Subiculum effusum, submembranaceum ubique denseque hirtum; aculeolis erectis subconoideis simplicibus v. ramulosis sursum attenuatis abrupteque in perithecia subglobosa desinentibus; Asci numerosi, ovati, octospori, aparaphysati; sporidia subfusoidea 3-septata hyalina. — Gen. a *Capnodaria*, *Limacinia*, *Scoria* eximie distinctum quia sit statu conidico, conidiis hyalinis stellatis (*Trinacrium*) ornato, concomitatum.

1. **Paracapnodium pulchellum** Speg., l. c. p. 325, fig. 7. — Late effusum, sæpius epiphyllum, aterrimum, glomerulosum, ex hyphis tortuoso-intestini-formibus coalescentibus crebre septulatis, articulis 2-4 μ . cr., sæpius biguttulatis, obscure olivaceis efformatum; stipitibus crebris breviter ramosis 250-1000 μ . long., deorsum crassiusculis atque laxè potentiusque setulosis, apice perithecio subgloboso minuto vix papillulato, 60-80 \approx 50-60 ornatis; ascis dense constipatis octosporis, antice subtruncatis crasseque tunicatis postice brevissime noduloseque pedicellatis 24-30 \approx 10-14; sporidiis e fusoides lenissime subclavulatis utrinque obtusiusculis, 12-14 \approx 4-5 ad septum medium constrictulis, loculo tertio supero sæpius crassiore, loculis plerumque grosse uniguttulatis, semper hyalinis.

Hab. ad folia viva Ilicis paraguariensis in silvis prope San Pedro Misiones, Argentina Amer. austr. — In pilis stipitum adsunt conidia (*Trinacrium pulchellum* Speg.) radiatim 3-4-ramosa, ramulis hyalinis 1-3-septatis, 10-15 \approx 2.

NÆTROCYMBE Körb. Lich. sel. Germ. n. 58 (1858) (Etym. *nætron* fusus et *cymbe* navicula, ob sporidia initio fusoides), *Coccodinium*

Massal. Esam. comp. p. 55 (1860). — Subiculum spongioso-crustaceum ex hyphis moniliformibus, atris conflatum. Perithecia globosa, papillata, molliuscula, minute pertusa, dein discoideo-collabentia, subiculo inserta v. cineta. Asci octospori, breves, mucoso-paraphysati. Sporidia fusoideo-oblonga, pluriseptato-muriformia, brunnea.

- 1 **Nætrocymbe fuliginea** Körb. Par. Lich. pag. 442, Rehm, Discom. 3516 pag. 501, *Coccodinium Bartschii* Mass. — Subiculo 2-4 mm. cr., spongioso-crustaceo, brunneo-nigricante, late effuso ex hyphis ramosis, constricto-septatis, 6 μ . cr., formato; peritheciis sparsis v. confertis sessilibus v. infossis, globosis, clausis, 200-300 μ . diam., in osculum minutum rotundum leviter productis, siccis collabentibus, brunneis; ascis clavato-ovoideis, apice rotundatis, 75-80 \approx 30, octosporis, paraphysibus tenuissimis ramotis mucosæ jodi ope cærulescente obvolutis; sporidiis oblongis, fusoideis v. clavatis initio 2-4- dein 8-cellularibus, septisque uno alterove longitudinali partitis, brunneis 22-36 \approx 9-12, polystichis, articulis 1-guttulatis.

Hab. in rami Alni et Tiliæ in Germania et Austria.

Fam. 2. Sphæriaceæ Fr.

Sect. 1. Allantosporeæ.

ENCHNOA Fr. — Syll. I p. 89, IX p. 442, XI p. 271, XIV p. 478, XVI p. 1128, XVII p. 560.

1. **Enchnoa Yerbæ** Speg., Ann. Mus. Nac. Buenos Aires t. XVII 3517 (1906) p. 197 cum icon. — Peritheciis atris hinc inde dense gregariis subcarbonaceis, lenticulari-hemisphæricis, subiculo atro absconditis, serius denudatis ac grosse ostiolato-perforatis, 150-180 μ . diam.; ascis clavatis, longiuscule pedicellatis, aparaphysatis, octosporis 100-110 \approx 10, p. sp. 50-60 μ . long.; sporidiis cylindraceis subrectis, hyalinis, utrinque acutiuscule obtusatis, 16-18 \approx 4-5,5, minute 2-guttulatis.

Hab. ad ramos decorticatos putres mucidos secus rivulum Matto Queimado, Misiones Argentina. — Subiculi hyphæ subflexuosæ, septulatae 50-150 \approx 5.

2. **Enchnoa alnicola** v. Höhn., Fragm. z. Myk. II, in Sitzb. k. Ak. 3518 d. Wiss. Wien CXV, Abt. I (1906) p. 7. — Peritheciis densi-

seculi sparsis, 1 mm. lat., discoideo-depressis, mollibus, semper tectis et tantum papilla minuta ostiolarum erumpentibus, brunneo-lanatis, hyphis violaceo-brunneis, 4-5 μ . cr.; ascis copiosissimis, teneris, stipitatis, clavatis, octosporis, 60-80 \times 6-8; paraphysibus copiosis ascos multo superantibus, filiformibus, 3-5 μ . cr.; sporidiis 2-5-seriato-conglobatis, flavidis, coacervatis brunneolis, allantoideis, curvulis, plasmate sæpe bipartito, 8-12 \times 1,5-2,5.

Hab. in ramulis Alni (glutinosa?) secus Danubium pr. Tulln Austriæ. — *Enchnocæ lanatae* affinis.

NITSCHKEA Otth — Syll. XI p. 172, XVI p. 417, XVII p. 561.

1. *Nitschkea crustacea* (Karst.) Sacc. et Trott., *Celosphaeria crustacea* 352

Karst., Acta Soc. pro Faun. et Fl. fenn. XXVII, 4 (1906) p. 7.

— Peritheciis confertissimis, exquisite cupuliformibus, atris, nudis, minutissimis; ascis tereti-clavatis, octosporis; sporidiis subdistichis, elongatis, curvulis v. rectis, hyalinis, 8-12 \times 2.

Hab. in ramulis arborum decorticatis prope Palovince in Sibiria (O. LÖNNBOHM).

2. *Nitschkea moravica* Niessl in J. Paul, Verh. naturf. Ver. in Brünn 352

XLVII p. 21 (extr.). — Peritheciis aggregatis, sæpe dense caespitosis, 0,2 mm. circ. diam., subovoideis, centro collabescendo cupuliformibus, subatris, basi fibrosis; ascis clavatis, longe stipitatis 50-70 (parte spor. 40 μ .) \times 12, octosporis; sporidiis 1-3-stichis, cylindratis, curvatis, hyalinis, utrinque obtusis uniguttulatis, 10-11 \times 2-3.

Hab. in ramis emortuis Æsculi Hippocastani pr. Schöneberg Bavaricæ. — *A. Nits. Fucklii* (= *Celosp. cupularis* [Pers.] Karst.) differt peritheciis basi fibroso-floccosis et ascis clavatis.

ACANTHONITSCHKEA Speg., Ann. Mus. Nac. Buenos Aires t. XVII (1908) p. 116 (Etym. *acantha*, spina et *Nitschkea*). — Perithecia superficialia, e coriaceo submembranacea, in sicco collabescentia, asci paraphysati, octospori. Sporidia allantoidea, curva, continua, hyalina. — Est quasi *Nitschkea setigera*.

1. *Acanthonitschkea argentinensis* Speg., l. c. p. 117, cum icon. — 352

Peritheciis hinc inde caespitosis v. sparsis, cortice insidentibus, e nigro glaucescentibus, 200-250 μ . diam., minute papillatis, in sicco cupulato-collabentibus, basi hyphis paucis radiantibus septulatis, olivaceis, 100 \times 6-7 cinctis, setulisque erectis, rigidulis, acutis, opacis, 50-200 \times 10 conspersis; contextu indistincto opaco, nigro; ascis

clavatis breviter tenuato-pedicellatis, p. sp. $20 \approx 10$; sporidiis cylindraceo-allantoideis, utrinque obtusis, $6-8 \approx 2$, valde incurvatis, utrinque minute guttulatis, hyalinis.

Hab. ad ramos emortuos subputrescentes Ilicis paraguayensis in Campos das Cuias Argentinae.

FRACCHIÆA Sacc. — Syll. I p. 93, IX p. 445, XI p. 272, XVI p. 418.

1. **Fracchiæa Romelliana** Berl. Ic. fung. III, p. 26, t. XXXII, f. 3. 3522
— Peritheciis lignicolis, denudatis (an primum cortice tectis?) superficialibus, nigris, in greges parvos collectis, rugulosis, complanatis v. collapsis, centro minute pertusis, $\frac{1}{4}-\frac{1}{3}$ mm. diam.; ascis clavatis sessilibus, $80-90 \approx 15-18$, polyporis; sporidiis valde confertis, allantoideis, innumeris, $7-8 \approx 2$, hyalinis, in asco pallidissime lutescentibus, utrinque minutissime 1-guttatis.

Hab. in cortice Rosæ, Upsaliæ Sueciæ (ROMELL in herb. Sacc.).

2. **Fracchiæa cucurbitarioides** Speg. — Syll. I, p. 94. — f. **eucalyptina** (Berl.) Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 333 (sub f. *Eucalypti*). — f. **Pini-insignis** Speg., l. c. p. 333: peritheciis ligno denudato hinc inde gregariis v. sparsis, globoso-depressis, vix papillulatis subcarbonaceis; ascis breviter crasseque attenuatis, $120 \approx 20$, aparaphysatis, pleiosporis; sporidiis cylindraceis vix curvulis utrinque rotundatis, $9-10 \approx 1,5$, minute 1-guttulatis hyalinis. — f. **Quercus-sessilifloræ** Speg., l. c. pag. 334. — Peritheciis dense coacervatis acervulos atros compactos per rimas corticis durioris erumpentes efficientibus; ascis eximie clavulatis $100 \approx 18-20$ aparaphysatis pleiosporis; sporidiis cylindraceis leniter curvulis $10-12 \approx 1,5$ utrinque obtusis, eguttulatis hyalinis.

Hab. f. 1. prope S. Catalina, f. 2. Tucuman, f. 3. La Plata, in Rep. Argentina Amer. austr.

3. **Fracchiæa affinis** Syd. in De Wildem., Flore Bas-Moy. Congo, 3524 t. III, fasc. I (1909) Extr. p. 16. — Peritheciis superficialibus, solitariis vel paucis aggregatis, globosis, $200-350 \mu$. diam., mox, præcipue in sicco, profunde depresso-cupulatis, atris, non v. vix papillatis, dense minuteque rugulosis, coriaceis v. vix coriaceo-carbonaceis, basi pilis fuscis septatis $5-7 \mu$. cr. notatis; ascis aparaphysatis, clavatis, longissime stipitatis, p. sp. $20/32 \approx 9-11$, pedicello usque ad 50μ . longo, myriosporis; sporidiis cylindraceis plerumque rectis, hyalinis, continuis, biguttulatis, $5-8 \approx 1,5-2$.

Hab. ad cortices Kisanu, Congo (VANDERYST). — A *Fr. multiasca* Pat. differt sporidiis cylindraceis, angustioribus.

4. **Fracchiæa Coniferarum** v. Höhn. Fragm. Mykol. VII (1909) p. 31. 3525
— Peritheciis erumpentibus et peridermio laciniis cinctis, subsparsis, e globoso collabescendo subpatellatis, opace nigris, asperulis, firmis, coriaceis, 350-500 μ . diam., ostiolo obsoleto; cellulis contextus 10-12 μ . diam.; ascis polysporis teneris, apice rotundatis, breviter sensim stipitatis, 100-110 \approx 10-16; pseudoparaphysibus, articulatis ascos superantibus obvallatis; sporidiis irregulariter conglobatis allantoideis, curvulis v. rectis, utrinque 1-guttulatis 6-8 \approx 1,5, hyalinis.

Hab. in cortice Pinorum pr. Waidhofen Austriæ inf. (P. STRASSER). — Hyphæ ad peritheciis basim ramosæ, septatæ, atro-brunnæ, 6-6 μ . cr. — Peraffinis *Fracchiææ subcongregatæ* (B. et C.) Ell. et Ev. — Syll. XVI, p. 419.

NEOZIMMERMANNIA Koord., Botan. Untersuch. (1907) p. 68 (Etym. a Doct. ALB. ZIMMERMANN phytopathologo). — Perithecia stromate destituta, sparsa v. 2-15 inter se alte adnata, in cortice v. in foliorum epidermide immersa, globosa v. globoso-ovoidea vel angulata, ostiolo distincto conoideo breviusculo v. interdum sat longo pertusa, nigra, minuta, glabra, epidermide secedente quandoque sublibera. Asci octospori, aparaphysati, breviter stipitati, cylindracei v. cylindraceo-clavati, tunica apice incrassati et haud raro *Gnomonice* modo perforati. Sporidia eximie allantoidea, majuscula, continua, hyalina v. subhyalina, utrinque rotundata. — Genus *Massalongiellæ* proximum.

1. **Neozimmermannia Elasticæ** (Zimm.) Koord. in l. c. pag. 1-121, 3526
tab. I-X et p. 188, *Phomatospora Elasticæ* Zimm. — Syll. XVII. p. 578. — Peritheciis globosis 60-170 v. plerumque 100 μ . diam., ostiolo 80-270 plerumque 80-110 μ . longo; pilis deciduis subhyalinis simplicibus 60-100 μ . longis laxè pilosis; ascis 42-65 \approx 7-8; sporidiis 14-19 (plerumque 16-17) \approx 3,5-5, dense minutissimeque granuloso-guttulatis.

Hab. in foliis et ramulis emortuis Fici Benjaminæ, F. elasticæ, Hevæ brasiliensis, Asia, Africa et Europa (ubi introducta). — Huc pertinent status conidici qui plantam valde vexant: *Glaeosporium Elasticæ* Cooke et Massee, *Colletotrichum Ficus* Koord.

Sect. 2. Hyalosporæ.

PHTHORA D'Hérelle, Bull. Soc. Myc. Fr. XXV (1909) p. 184 cum tab. IX (Etym. a *ptheiro* destruo). — Stroma pelliculosum, minimum, nigrum, subcorticale, hinc inde carbonaceo-compactum, corticem elevans, celluloseum, nigrum, applanatum, forma irregulari. Perithecia superficialia, poro dehiscentia, gregaria, subseriata, membranacea, glabra, sessilia, nigra; frequenter duo aut plura seriatim coherentia, membrana separationis subinde evanescente et tunc perithecia tubum (?) maxime protensum efformant. Asci sphaerici, brunnei, sessiles, paraphysati; sporidiis simplicibus, sphaericis, hyalinis.

1. **Phthora vastatrix** D'Hérelle l. c. Characteres generis. Perithecia 3527 bene evoluta $50 \approx 38$, nucleo viscoso. Asci 5-8 μ . diam. octospori. Sporidia minutissima, sphaerica, 1-2 μ . diam. hyalina. Hyphæ mycelii ramosæ, septatæ, 2-8 μ . cr. demum nigræ.

Hab. in libro Coffeæ arabicæ, cui valde noxia, in Guatemala. E diagnosi et figuris l. c. species parum clara et quoad afinitates perdubia.

ASCOSPORA Fr. Summa Veg. Scand. p. 425 (1849), Wint. Krypt. Flora, Pilze II, p. 340 (1887) (Etym. *ascus* et *spora*). — Perithecia initio subcuticularia, minuta, poro pertusa, membranacea subglobosa, ut plurimum mycelio ramoso, adpresso, brunneo insidentia v. cincta. Asci perexigui, paraphysati; sporidia ovato-oblonga, hyalina, continua, rarissime basi pseudoseptata. — A *Guignardia* præsertim mycelio sæpe asteromatoideo et minutie dignoscitur. — Ad hoc genus pertinent: **Ascospora Silenes** (Niessl) Wint. (*Asterina Silenes* [Niessl] Sacc. Syll. I, p. 47); **A. melæna** (Fr.) Wint. (*Asterina melæna* (Fr.) Sacc. Syll. I, p. 48); **A. Himantia** (Pers.) Wint. (*Asterina Himantia* (Pers.) Sacc. Syll. I, p. 761); **A. microscopica** Niessl (*Asterina microscopica* (Niessl) Sacc. Syll. I, p. 45).

1. **Ascospora graminis** Lind, Fungi (Micromyc.) from North-East 3528 Greenland (1910) pag. 152, tab. X, fig. 1-2. — Mycelio repente, effuso, subpersistente, hypophyllo, fusco e hyphis torulosis, ramosis, septatis composito; peritheciis superficialibus, applanato-convexis, sparsis 80-100 μ . diam., medio perforatis; ascis fasciculatis, globoso-ovatis, sessilibus, apice crasse tunicatis, paraphysatis, octo-

sporis, $24-40 \times 13-17$; sporidiis ellipsoideis, inaequilateralibus, granulosis, hyalinis, conglobatis, $15-16 \times 4$.

Hab. in foliis emortuis Poæ glaucæ et P. abbreviatæ, Lille Snenaes, Groëlandia.

2. **Ascospora Ophiorrhizæ** Raciborski, Bull. Ac. Sc. Cracoviae (1909) 3529 p. 389. — Maculis epiphyllis, subrotundis, flavo-virentibus, 2-5 mm. lat.; peritheciis minutissimis, nigris, copiosis, subsparsis, innatis, globoso-depressis, $100-125 \mu$. lat., 100μ . alt., sub stromatibus evolutis, non prominulis, tenuiter membranaceis brunneis, circa ostiolum nigris ex mycelii hyphis endogenis ob haustoria punctatis oriundis; ascis fasciculatis, octosporis, apice rotundatis, $50-60 \times 14$, aparaphysatis; sporidiis ovato-oblongis, distichis, hyalinis, continuis, levibus, $10-11 \times 4-5$.

Hab. in foliis Ophiorrhizæ spec. in M. Gedeh Javæ.

GUIGNARDIA Viala et Rav. — *Læstadia* Auersw. — Syll. I p. 420, IX p. 577, XI p. 289, XIV p. 516, XVI p. 455 (*).

1. **Guignardia Lini** (Rostr.) Sacc. et Trott., *Læstadia Lini* Rostr., Bot. Tidsskr. XXVIII (1907) pag. 217. — Peritheciis lenticularibus, epidermide tectis, dense sparsis, copiosis; ascis clavato-oblongis, sessilibus 4-8-sporis, 40×9 ; sporidiis monostichis, oblongo-fusoides, $12-13 \times 3$.

Hab. in caulibus emortuis Lini perennis ad Olgin Lug in montibus Alai, alt. 3000 m. Asia occ. (O. PAULSEN).

2. **Guignardia Pegani** (Rostr.) Sacc. et Trott., *Læstadia Pegani* Rostr., Bot. Tidsskr. XXVIII (1907) p. 217. — Peritheciis nigris, dense gregariis, lentiformibus, depressis, $80-90 \mu$. latis; ascis ovato-oblongis, curvatis, sessilibus, aparaphysatis, 8-sporis, 60×24 , membrana superne usque ad 10μ . crassa; sporidiis inordinatis, oblongis, $12-13 \times 6$.

Hab. in caulibus emortuis Pegani Harmalæ in Transcapia (O. PAULSEN).

3. **Guignardia Vaccinii** Shear, Bull. Torr. Bot. Club XXXIV (1907) p. 316. — Pycnidiiis (*Phoma Shearii* Sacc. et Trott.) plerumque hypophyllis, densiuscule gregariis, $100-120 \mu$. diam., globosis vel depresso globosis, subcutaneo-erumpentibus, ostiolo brevissimo;

(*) De nominibus *Læstadia* et *Guignardia* cfr. TRAVERSO, Fl. ital. cryptog. Pyren. p. 375.

sporulis e hyalino melleis, levibus, $10,5-13,5 \times 5-6$, obovatis, apice subtruncatis, mucro granulato, fere inconspicuo, curvato partim obductis; sporophoris $10-15 \mu$. longis; peritheciis pycnidia omnino imitantibus; ascis octosporis tereti-clavatis pro more breviter stipitatis, aparaphysatis, $60-80 \times 9-12$; sporidiis levibus, hyalinis, ellipsoideis, v. subrhombeis et leniter inaequilateris, $13,5-16,5 \times 6,5-7$.

Hab. in foliis *Vaccinii macrocarpi*, New Jersey, Virginia, Massachusetts, Nova Scotia, Wisconsin Amer. bor.

4. *Guignardia humulina* Bubák, Ann. Mycol. IV (1906) pag. 110. — 3533
Peritheciis subepidermicis, cauliculis, sparsis v. aggregatis, globoso-depressis, $80-200 \times 50-100$, nigris, excipulo $8-20 \mu$. cr., atro-brunneo, grosse celluloso; ascis tereti-oblongis, rectis v. curvulis, 75×15 , breve stipitatis, apice vix tenuatis rotundatisque aparaphysatis; sporidiis ellipsoideo-oblongis, utrinque subconoides, $13-20 \times 4,5-7,5$, hyalinis.

Hab. in caulibus emortuis *Humuli Lupuli* prope Tábor Bohemiae.

5. *Guignardia Phytolaccae* Almeida et Da Camara, Bol. Soc. Brot. XXIV (1909) p. 11. — 3534
Peritheciis sparsis, plerumque gregariis, innatis, demum erumpentibus globoso-depressis, contextu pseudoparenchymatico roseo, poro pertusis, $130-150 \mu$. diam.; ascis subfusiformibus, rectis v. leniter curvulis, sessilibus, octosporis, $60-70 \times 12-15$; sporidiis distichis ellipsoideis, rectis, clavatisve et tunc deorsum tenuatis curvatisque, utrinque rotundatis, continuis, minute pluriguttulatis, $17-20 \times 7,5-8$, hyalinis.

Hab. in caulibus *Phytolaccae decandrae*, Choupal prope Coimbra (A. MOLLER). — Ubi contextus sit vere *roseus*, an species *Hypocreaceis* referenda?

6. *Guignardia rhytismophila* Rehm, Ascom. n. 1650 (1906), Ann. Mycol. III (1906) p. 70. — 3535
Peritheciis gregariis, epiphyllis, globulosis, nigris, ostiolo minutissimo prominentibus, demum patellari-collabentibus, $120-130 \mu$. diam.; contextu parenchymatico fusco; ascis fusoides, tenuibus $55-60 \times 12$, octosporis, aparaphysatis; sporidiis distichis, oblongo-ovoideis, utrinque rotundatis, continuis, utrinque 1-guttulatis, hyalinis, $12-14 \times 5-6$.

Hab. in foliis adhuc vivis *Aceris Pseudoplatani* a *Rhytismate acerino* infectis pr. Königstein Saxoniae (W. KRIEGER). — Perithecia plerumque in zonis albidis circa *Rhytisma* inserta.

7. *Guignardia Molleriana* Da Camara, Bol. Soc. Broteriana, XXV (1910) Extr. p. 6. — 3536
Peritheciis plerumque epiphyllis, in macula

indeterminata cinerescenti insidentibus, erumpentibus, sparsis, subglobosis, atris, poro pertusis, 150-180 μ . diam.; ascis tereti-clavulatis, sessilibus, aparaphysatis, 8-sporis, 60-80 \times 12-15; sporidiis distichis, ovato-oblongis v. ovoideo-fusoideis, hyalinis, continuis, utrinque rotundatis, 18-25 \times 6-9.

Hab. in foliis Magnoliæ sp., in horto botanico Coimbra Lusitaniae (A. MOLLER).

8. *Guignardia Lingue* (Speg.) Sacc. et Trott., *Læstadia Lingue* Speg., 3537 Fungi Chilenses (1910) p. 31, cum icon. — Maculis nullis; peritheciis sæpius epiphyllis parenchymate innatis, epidermide vix nigricata tectis, lenticularibus, minute ostiolatis, 100-150 μ . diam.; ascis cylindraceis breviter pedicellatis aparaphysatis, octosporis 80-90 \times 4-6; sporidiis fusoideo-ellipsoideis, 12-13 \times 3-3,5, sæpe guttulis, hyalinis.

Hab. in foliis siccis dejectis Perseæ Lingue prope Ciudad de Valdivia et Cerro Carracol de Concepcion Chile Amer. austr.

9. *Guignardia javanica* Koord., Botan. Untersuch. (1907) pag. 188, 3538 fig. 16, III. — Maculis maximis, indeterminatis, nigrescentibus, peritheciis innatis, laxe gregariis, amphigenis, sed sæpius epiphyllis, atris, glabris, 100-200 μ . diam., ovoideis, ostiolo brevi, crassiusculo, epidermidem perforante; ascis paraphysatis, cylindraceis, apice haud incrassatis, 8-sporis, 80-90 \times 25-30; sporidiis oblongis, hyalinis, continuis, subdistichis, utrinque rotundatis, 17-18 \times 8,5-10.

Hab. in foliis vivis Cordiæ suaveolentis prope Purwo-redjo, insula Java (KOORDERS).

10. *Guignardia Photiniæ* Almeida et Da Camara, Bol. Soc. Brot. XXIV 3539 (1909) p. 11, *Læstadia Photiniæ* Alm. et Cam. Revista Agron. (1906) p. 384. — Peritheciis epiphyllis, raro amphigenis, sparsis gregariisve, primo tectis, demum erumpentibus, subglobosis, poro pertusis, 150-200 μ . diam.; ascis irregularibus, sursum deorsumque tenuatis, breviter stipitatis, octosporis, 60-70 \times 14-16; sporidiis distichis amygdaliformibus, oblongo-ovatis, subinaequilateralibus, utrinque rotundatis, granuloso-farctis, rectis v. tenuiter curvulis, 16-18 \times 7-8.

Hab. in foliis Photiniæ sp. in Horto botanico, Coimbra Lusitaniae (A. MOLLER).

11. *Guignardia diffusa* (Crié) Sacc. et Trott., *Læstadia diffusa* (Crié) 3540 Sacc. et Trav. — Syll. XIX, p. 1044 — *Depazea diffusa* Crié in Ann. Sc. nat. Bot. VII (1878) pag. 38, t. II, f. 4, 10, 11, t. VI, f. 10, tab. VIII, f. 15, 27. — Peritheciis amphigenis, prominulis,

atris; ascis lunge clavatis, breviter tenuato-stipitatis; sporidiis oblique monostichis, oblongo-ellipsoideis, continuis, hyalinis.

Hab. in foliis *Quercus* et *Castanæ* in Gallia. — Teste auctore adsunt *Phyllostictæ* et *Septoriæ* species ut pycnidia habendæ; et quoque huc spectarent *Hendersoniæ*, *Pestalotziæ* et *Entomosporii* species, quod a priori excludendum.

12. *Guignardia microsticta* Sacc., sp. n. — Peritheciis hypophyllis 8541

dense gregariis, epidermide minutissime bullata et tunc punctato-dealbata tectis et vix denique erumpentibus, subglobosis, obsolete ostiolatis 150-200 μ . diam. nigricantibus, contextu parum distincte pseudoparenchymatico, atro-rufo; ascis fusoides apice obtusulis, 70 \approx 10-11 in stipitem facile dilabentem sensim tenuatis, parte sporifera 50-55 μ . longa; sporidiis octonis, oblongis, utrinque obtusulis, curvulis, 16 \approx 5,5, hyalinis, intus minute granuloso-farctis, strato mucoso hyalino sat persistente obductis; paraphysibus nullis.

Hab. in pagina inferiore *Cattleyæ* sp., cultæ in calidariis, Versailles pr. Parisios Galliæ (P. HARIOT). — Ob bullulas punctiformes albo-flavidas epidermicas perithecia tegentes species mox dignoscitur et habitum peculiarem induit. A *Guign.* (*Læstadia*) *Traversi* Cav. differt præter hanc notam, ostiolo non prominulo, sporidiis distichis et muco cinctis.

13. *Guignardia ? melanostigma* (Lév.) Sacc. et Trott., *Sphaeria melano-* 8542

stigma Lév, Voyage dans la Russie mérid. II, p. 105, t. V, f. 6 (1842). — Epiphylla, sparsa; peritheciis in areis decoloratis subcentralibus, nigris, globulosis, nitidulis, prominulis, atro-farctis, ostiolo obsolete; ascis brevibus, apice valde dilatatis 4-5-sporis; sporidiis globulosis (?) diaphanis.

Hab. in foliis Graminaceæ cujusdam prope Sou-Dagh Rossæ merid. — Affinis dicitur *Sphaerellæ recutitæ*, sed peritheciis maculicolis et non seriatis et sporidiis diversa.

14. *Guignardia Musæ* Raciborski, Bull. Accad. Sc. Cracovie (1909) p. 388. 8543

— Peritheciis epiphyllis dense stipatis, in maculis irregulariter et non distincte limitatis, rubellis dein brunneis arescentibusque; peritheciis subcutaneis, ostiolo minutissimo non emergente præditis, vix prominulis, excipulo superne nigro, inferne incolore donatis, globosis 70-100 μ . diam.; ascis aparaphysatis, paucis, fasciculatis, clavato-ovoides, crasse tunicatis, 50-56 \approx 20, octosporis; sporidiis ovato-oblongis, hyalinis, levibus, utrinque rotundatis leviter inæquilateris, 18-19 \approx 8-9, intra ascum 1-cellularibus, extra (germinando?) inæqualiter bicellularibus.

Hab. in foliis vivis Musæ paradisiacæ, Buitenzorg insulae Javæ.

15. *Guignardia Ulvæ* M. Reed, Univers. of California Publ. v. I 3544 (1902) p. 160, tab. V, fig. 1-6. — Peritheciis numerosis irregulariter sparsis, sphaeroideis, obtusiusculis, 364-509 μ . cr., ostiolatis in thallo matricis immersis, utriusque prominulis, ex brunneo nigris; ascis late clavatis, in pedicellum basi attenuatis, 53-57 \times 9, octosporis; sporidiis oblongis v. ovatis, plasmate granuloso-farctis, hyalinis, 10-13 \times 3,5-7.

Hab. in thallo plus minusve deformato *Ulvæ californicæ* in litore S. Francisco Californiæ.

16. *Guignardia alaskana* M. Reed, Univers. of California Publ. v. I 3545 (1902) p. 161, tab. XV, fig. 7 et tab. XVI. — *Leptostadia alaskana* (Reed) Sacc. et D. Sacc., Syll. XVII, p. 576. — Peritheciis brunneis v. nigris, numerosis, irregulariter distributis, sphaeroideis, in thallo matricis immersis 273-450 μ . cr., ostiolatis; ascis clavatis basi in pedicellum attenuatis, 25-33 \times 7-14, octosporis; sporidiis anguste ellipsoideis, utrinque acuminatis, membrana tenui, hyalina, 8,5-13,5 \times 3-4.

Hab. in thallo plus minusve deformato *Prasiolæ borealis* in litore Alaskæ. — Rursus referimus diagnosin ex ipso Auctore; diagnosin enim in Syll. (l. c.) allatam, ex icone (tab. VII) satis dissona in Harriman, Alask. Exped. eruimus.

17. *Guignardia Coccocarpiae* (Pat.) Sacc. et Trott., *Leptostadia Coccocarpiae* Patouill., Bull. Soc. Myc. Fr. XXIV (1908) p. 10. — Peritheciis erumpentibus dein superficialibus, sparsis, atris, nonnullis hyphis brunneis, septatis, 5 μ . cr., brevibus adfixis, globosis, levibus, apice papillatis, 300-400 μ . diam., contextu coriaceo, brunneo, celluloso, nucleum album includentibus; paraphysibus filiformibus, hyalinis, rarissimis; ascis clavatis, 7-sporis, 75 \times 10-15; sporidiis hyalinis, simplicibus, ovoideis, sæpe biguttulatis, uniseriatis, 10-12 \times 8-10, ope jodi nulla.

Hab. in thallo *Coccocarpiae* Gayanæ ex Chile (Gay).

18. *Guignardia Bambusæ* Miyake et Hara, Bot. Mag. Tokyo (1910) 3547 p. (238) [japonice].

Hab. in foliis *Bambusæ* sp. in Japonia.

19. *Guignardia juniperina* (Ellis) Rota-Rossi, Atti Ist. bot. R. Univ. Pavia ser. II, t. XIII. p. 206. — Ita vocanda *Leptostadia juniperina* (Ellis) Sacc. Syll. IX p. 586.

20. *Guignardia Theæ* (Racib.) Bernard, Bull. Dept. Agric. Indes 3549

Neerland VI (1907) p. 26. — Ita vocanda est *Laestadia Theae* Racib. — Syll. XVI, p. 456.

21. *Guignardia Betulæ* (Auersw.) Sacc. et Trott., *Sphaerella Betulæ* 3550
Auersw. in Gonn. et Awd. Mycol. europ. Heft V e VI, t. III, f. 36 (absque diagnosi).

Hab. in foliis *Betulæ* in Germania. — Ex icone: perithecia hinc inde conferta, hypophylla; asci tereti-obclavati, octospori; sporidia disticha v. oblique monosticha, obovato-oblonga, continua, hyalina.

GLOMERELLA Schenk et Spauld. — Syll. fung. vol. XVII p. 573.

— Perithecia non vere rostrata sed sursum sensin tenuato-piriformia, nec desunt species omnino erostres, hinc genus *Sphaeriaceis* potius quam *Ceratostomataceis* adscribendum. A *Physalospora* et *Guignardia* pseudostromate subpannoso videtur distinguendum. Paraphyses probabiliter in pluribus speciebus, saltem initio, adsunt.

1. *Glomerella Gossypii* Edgerton, Mycologia, I (1909) p. 119, fig. 1 3551
et tab. VIII. — Peritheciis discretis v. aggregatis, copiosissimis, innatis, ostiolo erumpentibus, rarius subsuperficialibus, brunneo-nigricantibus, subglobosis v. piriformibus, 100-160 \times 80-120, plerumque 140 \times 115; ostiolo nunc brevi, interdum tereti-conoideo 60 μ . longo; ascis numerosis, clavatis, 55-70 \times 10-14; sporidiis uniseriatis v. irregulariter biseriatis, subellipsoideis, raro curvulis, granulosis, 1-nucleatis, hyalinis, 12-20 \times 5-8, plerumque 13-14 \times 7; paraphysibus tenuibus, copiosis, perithecii cavitatem supra ascos implentibus.

Hab. in caulibus *Gossypii* herbacei, Baton Rouge, La, Amer. bor. Status conidiophorus est *Colletotrichum Gossypii*. — Species *Gossypio* vere noxia.

2. *Glomerella fusarioides* Edgert., Botan. Gazette XLV (1908) p. 404 3552
Nota. — Peritheciis subliberis, subsparsis sed copiosis, brunneo-nigricantibus, subglobosis v. piriformibus, interdum sensim subrostratis, 150-200 \times 140-175; ascis numerosis, clavatis, 50-75 \times 9-10; sporidiis irregulariter biseriatis, rectis v. curvulis, 12-18 \times 3-4.

Hab. in caulibus *Asclepiadis syriacæ*, Ithaca New York. — Status conidiophorus est, teste Edgerton, *Glæosporium fusarioides* E. et K., cujus vero diagnosi videtur inedita.

3. *Glomerella Artocarpi* Delacroix, Bull. trim. Soc. Myc. de France, 3553
vol. XXI, p. 198-200, tab. XII — Peritheciis, cuticula rupta, superficialibus, epiphyllis, *Colletotricho* vel *Glæosporio* contiguus,

structura subcellulosa, rotundatis v. subdepressis, collo minuto, ostioliformi, atque ad marginem foraminis hyphis, rectis, brevibus, septatis, pallide brunneis præditis, $130 \approx 70-85$; ascis aparaphysatis $65-70 \approx 10$, sublavatis vel cylindræis vel oblongis, rectis vel interdum subcurvulis, in asco oblique monostichis, $15 \approx 4$.

Hab. in foliis emortuis *Artocarpi incisæ* ex Africa. — Exemplaria visa forte immatura, ex auctore ipso.

4. *Glomerella fructigena* (Clint.) Sacc. Syll. XVII, p. 573 et XVIII, 3554 p. 450 — Var. *Vaccinii* Shear, Bull. Torr. Bot. Cl. XXXIV (1907) pag. 314. — Conidiis curvulis tereti-subclavatis, rubescentibus, $12-18 \approx 4,5-6$; setulis raris occurrentibus; peritheciis subiculo panoso atro-brunneo fultis, subglobosis, leviter rostratis; ascis $60-72 \approx 10-12$; sporidiis sub-distichis, e hyalino brunneolis, granulosi, oblongo-ellipsoideis, $9-18 \approx 5-7,5$.

Hab. in foliis *Vaccinii macrocarpi*, New Jersey in America boreali.

APIOSPOROPSIS (Trav.) Giuditta Mariani in Atti Soc. ital. Sc. Nat. L (1911) p. 165 (Etym. ab *Apiospora* cujus est analogum genus) *Guignardia* subg. *Apiosporopsis* Trav. Fl. ital. crypt. Pyren. p. 391 (1905), *Sphærognomonina* A. Potebnia in Ann. Mycol. (1910) p. 54. — Asci gnomoniaci seu tunica apice perforata præditi, sed perithecia erostrata *Guignardiacæ*. Huc spectant: *Apiosporopsis carpinea* (Fr.) et *Ap. veneta* (Sacc. et Speg.). Quoad diagnoses cfr. Traverso l. c.

1. *Apiosporopsis Saccardiana* G. Mariani in Atti Soc. ital. Sc. Nat. 3555 L (1911) p. 165, fig. 1. — Peritheciis sparsis, hypophyllis, atris, globoso-depressis $200-300 \mu$. latis, foliorum parenchymate immersis, prominulis, epidermidem etiam in pagina superiore nigrefacientibus, ostiolo distincte conico, minuto præditi; ascis cylindræis, breviter pedicellatis, apice bi-foveolatis, $80-100 \approx 8-9$, spurie paraphysatis; sporidiis typice monostichis, ellipsoideo-oblongis, prope basim 1-septatis, $14-17 \approx 3,5-4$, hyalinis.

Hab. in foliis putrescentibus *Eriobotryæ japonicæ* prope S. Bento, circa Coimbra Lusitanicæ, novembri 1903. (A. MOLLER).

PHOMATOSPORA Sacc. — Syll. I p. 432, IX p. 589, XI p. 291, XIV p. 519, XVI p. 456.

1. *Phomatospora Fragariæ* Krieger et Rehm, in Krieger Ann. My- 3556 col. IV (1906) p. 39. — Peritheciis in hypophyllo dealbato di-

spersis innatis semiglobosis dein conoideo-prominentibus breviter rostratis, atris, excipulo parenchymatico glabro, tenui, subfusco, 100 μ . diam., ascis cylindraceis sessilibus apice rotundatis c. 70 \times 9, 8-sporis; sporidiis ovoideis, 1-cellularibus, hyalinis, strato mucoso obductis, 7-10 \times 4.5-5, 1-stichis; paraphysibus nullis.

Hab. ad folia anni præteriti *Fragariæ vescæ* pr. Königstein Saxoniae.

2. **Phomatospora Saccardoi** Rehm. Syll. f. II, p. 433, IX p. 590. — 3557
 Var. *leptosphaerioides* Rehm., Contrib. Myc. Fl. Hung. Nővény-tani Közlem. (1905) p. 1. — Peritheciis in epidermide longe lateque fuscata nidulantibus, 0,3 mm. diam., rostro peritheci longè prominente; sporidiis 10 \times 5.

Hab. ad caulem *Aconiti* putridum, Nagytarpataki-Völgi (Tátra) Hungariæ (Dr. LINHART).

3. **Phomatospora Trevoæ** Speg., Fungi Chilenses (1900) p. 32 cum 3558
 icon. — Peritheciis laxè gregariis, lenticularibus pusillis, coriacellis epidermide tectis, 80-100 μ . diam.; ascis 6-18 in quoque perithecio, ovatis subsessilibus aparaphysatis, octosporis, 45-55 \times 15-20; sporidiis oblanceolatis hyalinis, 14-18 \times 5-6.

Hab. in ramis siccis emortuis *Trevoæ* trinervis San Bernardo prope Santjago, Chile Amer. austr.

4. **Phomatospora Kentiæ** Speg., An. Mus. Nac. Buenos Aires, t. XIX, 3559
 (1909) p. 334. — Maculis effusis sordide pallescentibus; peritheciis pusillis sparsis v. obsolete seriatis, nigris, e globoso lenticularibus 120-150 μ . diam., primo epidermide velatis serius erumpentibus; ascis constipatis antice obtusiusculis postice in pedicellum breviusculum sensim attenuatis 75-90 \times 10-12, aparaphysatis v. paucissime pseudoparaphysatis, octosporis; sporidiis rectis v. oblique distichis cylindraceo-ellipsoideis 18-22 \times 5-6, utrinque obtusiusculis inæquilateralibus hyalinis v. nubilosis.

Hab. ad petiolos emortuos *Kentiæ* Balmoreanæ, Buenos Aires, Amer. austr. (E. AUTRAN).

5. **Phomatospora paulensis** Rehm, Ann. Mycol. V (1907) p. 524. — 3560
 Peritheciis in maculis orbicularibus subochraceis, dilute cinereocinctis, epiphyllis, 3-8 mm. lat., innatis, arcte confertis in hypophyllo maculis minus conspicuis, dein emergentibus, semiglobosis, minutissime papillatis, poro conspicuo pertusis, nigris, subnitentibus in epiphyllis, 150-200 μ . diam., membranaceis fusco-contextis; ascis cylindraceis, 70-80 \times 12, 8-sporis; sporidiis oblongoglobosis, 1-cellularibus, guttulis oleosis repletis, strato gelatinoso

tenuissimo obductis, hyalinis, 10-12 \approx 7-8, 1-stichis; paraphysibus nullis.

Hab. in foliis coriaceis? Sao Paulo Brasiliæ (USTERI). — *Phys. varianti* videtur subaffinis.

PAIDANIA Raciborski. Bull. Ac. Sc. Cracovie (1909) p. 350 (Etym. a botanico collect. sundanico PA IDAN). Cfr. v. Höhn. Fragm. z. Mykol. VII, pag. 17. — Perithecia parasitica phyllogena, semieremptia, conica, basi applanata, ostiolo acuto dehiscencia exicipulo inferius tenui, superne in membranam crassam dense cellulosa, brunneam 3-5-lobam, conspicue radiatam hyalino-fimbriatam abeunte. Asci cylindracei octospori, paraphysati. Sporidia monosticha, ovoidea, continua, hyalina. — Ob membranam coroniformem, fimbriatam mox dignoscitur genus.

1. **Paidania Melastomacearum** Rac. l. c. v. Höhn. l. c. fig. 1. — Cha- 3561
racteres generis; perithecia brunnea, 220-310 μ . diam.; corona fimbriata 450-500 μ . lata, 100-120 μ . cr., asc. 90-96 \approx 17-20; sporidia ovoideo-globulosa, intus minute granulosa, hyalina 13-15 \approx 7.

Hab. in pag. infer. foliorum Dissochaetæ sp. Depok in M. Salak et Gedeh ins. Javæ.

PHYSALOSPORA Niessl — Syll. I p. 433, IX p. 591, XI p. 291, XIV p. 520, XVI p. 457, XVII p. 203.

1. **Physalospora Lardizabalæ** Speg., Fungi Chilenses (1910) pag. 34 3562
cum icon. — Maculis nullis; peritheciis hinc inde sparsis sæpius hypophyllis sublenticularibus minutis subcarbonaceis 100-120 μ . diam.; ascis cylindraceis non v. parcissime paraphysatis, 60-80 \approx 6-7, octosporis; sporidiis oblique monastichis ellipsoideo-subfusoides, hyalinis, 10-12 \approx 3-4.

Hab. in foliis Lardizabalæ biternatæ in silvis Carro de Caracol Concepcion, Chile Amer. austr. — Sporidia quandoque occurrunt subchlorina et subuniseptata.

2. **Physalospora Acænæ** P. Henn., Deutsche Südpolar-Exped. VIII 3563
(1906) p. 10 (extr.) tab. II, fig. 4. — Peritheciis innato-suberumpentibus, sparsis, subglobosis, atro-membranaceis, ostiolatis, 80-90 μ . diam.; ascis subclavatis, apice obtuse rotundatis, octosporis, 35-45 \approx 4-6; paraphysibus filiformibus, flexuosis, hyalinis; sporidiis subdistichis, fusoides, utrinque subacutis, continnis, hyalinis 7-9 \approx 3-3,5

Hab. in caulibus decorticatis *Acænæ* ascendentis in ins. Kerguelen Ocean. ind. (E. WERTH).

3. **Physalospora atro-inquinans** Rehm, Ann. Mycol. VI (1908) p. 317. 3564
Peritheciis in maculis epiphyllis foliorum vivorum orbicularibus, vix decoloratis -1 cm., lat. sub epidermide denigrata innatis eamque elevantibus, globulosis, demum denudatis, atris poro vix perspicuo pertusis, membranaceis, 0,1 mm. diam.; ascis cylindraceis, apice rotundatis 60-70 \times 10-12, 4-sporis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, gregariis, guttulis oleosis repletis, hyalinis, 15 \times 9; paraphysibus subramosis, septatis 2 μ . cr.

Hab. ad folia viva *Papilionaceæ* (? *Phaeseoli*) Sao Francisco Brasilæ (ULE). — A *Ph. Astragali* peritheciis epidermide leviter nigrificata tectis distinguenda videtur.

4. **Physalospora Ramosii** P. Henn., Hedwigii XLVII (1908) p. 257. 3565
— Maculis flavidulis v. obsoletis, sparsis; peritheciis epiphyllis gregariis, erumpentibus, pulvinatis, atris, opacis; ascis clavatis, obtusis, paraphysatis, 8-sporis, 40-50 \times 8-12; sporidiis oblique monostichis v. subdistichis, subglobosis v. ovoideis, hyalinis, intus granulatis, hyalinis, 6-8 \times 5-7.

Hab. in foliis *Derridis* sp. Luzon Prov. Rizal, Ins. Philipp. (RAMOS).

5. **Physalospora congensis** P. Henn., in Fl. du Bas- et Moy.-Congo, 3566 v. II fasc. III (1908) p. 226. — Maculis rotundatis v. effusis, pallidis exarescentibus; peritheciis epiphyllis sparsis v. subconcentrice dispositis, punctiformibus subsphæroideis v. lenticularibus atris, 130-160 μ . diam.; ascis clavatis v. fusoideis, vertice obtusis v. acutiusculis, 8-sporis, paraphysatis, 40-52 \times 6-10; sporidiis oblique monostichis v. subdistichis, ellipsoideis, continuis, hyalinis, 4-5 \times 3,5.

Hab. in foliis *Millettiæ*, Sonzo, Congo, (VANDERYST).

6. **Physalospora neglecta** Petch, Ann. R. Bot. Gard. Peradeniya IV 3567 Pt. IV (1909) p. 304. — Peritheciis 0,3 mm. circ. cr., gregariis, in cortice immersis dein erumpentibus, leniter depressis, papilla parva abrupta, 0,08 mm. diam. et 0,08-0,12 mm. alta præditis, nigris æqualibus; ascis 140-160 \times 35, clavatis, initio crasse tunicatis, octosporis; paraphysibus numerosis, septatis,asco brevioribus; sporidiis hyalinis, crasse tunicatis, inæquilateralibus, cymbiformibus, 32-40 \times 12-16, distichis.

Hab. in ramis vivis *Theæ* sp., in quibus corticem lacerat et callos cancriformes efformat, Kadugannava ins. Ceylon.

7. *Physalospora Bersamæ* Syd. Deutsche Zentral.-Afrika Exped. 3568 (1907-1908) II, p. 98. — Maculis amphigenis, irregularibus, indeterminatis, flavidis, 0,5-1,5 cm. latis; peritheciis in maculis numerosis, epiphyllis, gregariis, discretis, globulosis, 180-240 μ . diam., epidermide elevata tectis et ostiolo papilliformi, atro tantum prominulis; ascis clavatis, 70-80 \times 20-22, octosporis, paraphysatis; sporidiis distichis, ellipsoideis, utrinque rotundatis et grasse 1-guttulatis, continuis, hyalinis, 14-18 \times 10-12.

Hab. in foliis Bersamæ ninagongensis, prope Kissenje Africæ trop.

8. *Physalospora Oreodaphnes* Theiss., Beih. Botan. Centralbl. Bd. 3569 XXVII (1910) Abt. II, p. 400. — Maculis in epiphyllis brunneogrescentibus, in hypophyllo fusco-brunneis, 3-10 mm. latis; peritheciis epiphyllis in maculis densiuscule gregariis, innatis, atris, nitentibus, semigloboso-conoideis, 180-240 μ . diam., poro minutissimo pertuso; ascis cylindræis, p. sp. 58-72 \times 10-12, deorsum in pedicellum usque ad 30 μ . long. attenuatis; paraphysibus filiformibus; sporidiis monostichis, hyalinis, continuis, utrinque rotundatis, ellipsoideis, 12-14 \times 8-9 v. subglobosis 7-9 μ . diam.

Hab. in foliis emortuis Oreodaphnes vaccinioidis, Sao Leopoldo Rio Grande do Sul Brasilæ. — A *Ph. manaoensis* Henn. differt maculis, ascis, sporis majoribus etc.

9. *Physalospora Coffeæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 3570 (1909) p. 334. — Peritheciis lenticularibus 90-100 μ . diam., obsolete ostiolatis glabris, membranaceo-coriaceis, contextu indistincte atro opaco donatis, sparsis v. sæpius densiuscule gregariis, macula effusa pallescente v. sordidula insidentibus; ascis cylindræis antice obtusis rotundatis, postice breviter attenuato-pedicellatis, 60-80 \times 5-8, octosporis, paraphysibus piliiformibus longioribus densiusculis obvallatis; sporidiis sæpius distichis ex ellipsoideo cylindræis subnavicularibus 8-12 \times 8-4, utrinque obtusiusculis non vel minute biguttulatis, hyalinis.

Hab. ad ramulos decorticatos putrescentes Coffeæ arabicæ Oran prov. Salta Rep. Argentina Amer. austr.

10. *Physalospora Morindæ* Koord., Botan. Untersuch. (1907) p. 190, 3571 fig. 18, II. — Maculis orbicularibus v. oblongis arescendo flavescentibus, 10-15 mm. diam.; peritheciis amphigenis, gregariis, globoso-depressis, ostiolo punctiformi, atris, glabris, 100-110 μ . diam., tectis; ascis paraphysatis, clavatis, fasciculatis, 45-50 \times 10-12, crasse tunicatis, 8-sporis; sporidiis oblongis, continuis, hyalinis,

rectis v. subrectis, utrinque obtusis v. rotundatis, intus granulosis, 11-13 \times 4-5; paraphysibus paucis indistinctis.

Hab. in foliis vivis Morindæ citrifoliæ prope Purworedjo prov. Ledu ins. Java (KOORDERS).

11. **Physalospora Clerodendri** Syd., in De Wildem., Flore Bas- et 3572
Moy. Congo t. III, fasc. I (1909) Extr., p. 14. — Peritheciis epiphyllis, sine maculis, sed plerumque per totum folium v. magnam ejus partem æqualiter distributis, innato-erumpentibus, subglobosis, 120-180 μ . diam., pertusis, atris; ascis clavatis, apice obtusis, longissime stipitatis, p. sp. 45-60 \times 18-25, stipite usque ad 50 μ . longo, octosporis; sporidiis distichis v. irregulariter positis, oblongo-ellipsoideis, continuis, hyalinis, tandem hyalino-fusculis, 12-18 \times 6-7.

Hab. in foliis Clerodendri sp., Kisanu, Congo (VANDERYST).

12. **Physalospora Amphilobii** Rehm, Ann. Mycol. VII (1909) p. 536. 3573
— Peritheciis in epiphyllis foliorum hand maculorum juxta nervum primarium seriatim innatis, globulosis, papillula minutissima prominente, nigra, glabra, 0,12 mm. diam., parenchymatice contextis; ascis cylindraceis, 70-80 \times 12-14, octosporis, J.-; sporidiis oblongo-clavatis, unicellularibus, guttulatis, hyalinis, 20-22 \times 6-7, distichis; paraphysibus filiformibus.

Hab. in foliis Amphilobii Vauttieri, Sao Leopoldo Rio Grande do Sul Brasiliæ (S. J. THEISSEN).

13. **Physalospora Kellermanii** Rehm, in Kellermann, Journ. of My- 3574
col. XIV (1908) pag. 5. — Peritheciis in utraque pagina foliorum languescantium, subinde fuscidulorum gregarie innatis, hemisphærice prominentibus, lenticularibus, glabris, atris, minutissime papillatis, demum foveolam nigram in folii parenchymate reliquentibus, parenchymatice fuscidule contextis, 0,2 mm. diam.; ascis cylindraceis, teneris, 60 \times 8, 8-sporis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, hyalinis, guttulis minimis repletis, 12 \times 6, monostichis; paraphysibus filiformibus.

Hab. in foliis Shillingiæ acutifoliæ, Livingston Guatemalæ (KELLERMAN).

14. **Physalospora Hoyæ** v. Höhnelt, Fragm. z. Mykol., Sitzb. K. Ak. 3575
d. Wiss. Wien, Bd. CXIV Abt. I (1907) p. 122. — Peritheciis nigris, punctiformibus, sparsis v. lineatim subseriatis, amphigenis, areolis 3-4 mm. latis insidentibus, globosis, ostiolo obtuso erumpentibus, 120-180 μ . diam., contextu tenero, pallide brunneo; ascis clavatis, sessilibus, apice obtusis, teneris, octosporis, 60-90 \times 12-15, paraphysibus crassiusculis 3 μ . cr., multi-guttulatis, facile

diffluentibus obvallatis; sporidiis distichis, hyalinis, continuis, intus granulosis, elliptico-clavulatis, utrinque obtusulis v. acutulis, $16-23 \approx 6,5-8$.

Hab. in foliis emortuis Hoya sp. in insulis Samoa Polynesiae (Dr. RECHINGER). — Dispositio peritheciolorum interdum subdendritica. *Phys. affini* proxima.

15. **Physalospora Fagrææ** v. Höhnelt, Fragm. z. Mykol., Sitzb. R. 357

Ak. d. Wiss. Wien Bd. CXVI Abt. I (1907) p. 123. — Peritheciis nigris, globosis, leviter prominulis, subinde annulo albido cinctis, membranaceo-firmis, $150-200 \mu$. diam., ostiolo subrotundo-depresso 32μ . diam. præditis, hypophyllis late gregariis, maculam nullam gignentibus; ascis copiosis, clavatis breviter noduloso-stipitatis, sursum subtenuatis, octosporis, $50-80 \approx 10-13$, paraphysibus filiformibus, diffluentibus; sporidiis subdistichis, oblongo-fusoides, rectis, obtusulis, $18-23 \approx 5-5,5$, hyalinis, fæctis v. granulosis.

Hab. in foliis Fagrææ sp. ex Loganiaceis pr. Utumapa ins. Samoa Polynesiae (RECHINGER).

16. **Physalospora placida** Syd., Ann. Mycol. VII (1909) p. 544. — 35

Maculis amphigenis, orbicularibus, in epiphyllis griseis, in hypophyllo brunneolis, linea elevata fusco-purpurea cinctis, $3-10$ mm. diam.; peritheciis epiphyllis, epidermide diu tectis, lenticulari-globosis, apice papillula minuta atra nitida præditis, atris, $125-200 \mu$. diam.; ascis cylindræis v. cylindræo-fusiformibus, apice mox rotundatis, mox leniter attenuatis, basi breviter stipitatis, $62-88 \approx 11-15$, octosporis; sporidiis distichis, subcylindræis, apice rotundatis, basi plerumque attenuatis, rectis, continuis, hyalinis v. hyalino-chlorinis, $21-28 \approx 4$, plasmate sæpe bipartito; paraphysibus numerosis, filiformibus ascos superantibus.

Hab. in foliis vivis Minusopis, Africa or. lusitanica (C. W. HOWARD).

17. **Physalospora melastomicola** Speg., Fungi Paulist., Rev. Mus. La 3

Plata t. XV (1908) p. 18. — Maculis amphigenis, primo pallescens, dein cinereo-arescentibus, limitatis, $2-4$ mm. diam., areola fusciscenti-rubescens plus minusve lata cinctis; peritheciis sæpius epiphyllis, laxè gregariis minutis, $80-100 \mu$. cr., glabris, coriacellis atris, contextu parenchymatico parum distincto fuligineo; ascis subcylindræis apice obtuse rotundatis v. subtruncatis, deorsum leniter cuneato-attenuatis, brevissime crasseque pedicellatis $60 \approx 8-9$, octosporis, paraphysibus paucis filiformibus obvallatis; sporidiis linearibus leviter inæquilateralibus, utrinque subacutius-

cule rotundatis 16-25 \times 3-4 hyalinis, continuis, rarius diblastis vel quadriguttulatis.

Hab. in foliis languidis Melastomaceæ cuiusdam, Ipiranga, Cambucy Brasilæ (USTERI).

18. *Physalospora Diapensiæ* Rehm, Ann. Mycol. VI (1908) p. 323. 3579

— Peritheciis in pagina superiore dealbata foliolorum gregariis, innato-erumpentibus, dein fere sessilibus, globulosis haud papillulatis, atris, glabris, membranaceis 100-120 μ . diam.; asci clavatis, ad basim latioribus, sessilibus, 8-sporis, 50 \times 10; sporidiis clavulatis, 1-cellularibus, utrinque rotundatis, hyalinis, 18-20 \times 5-6, distichis; paraphysibus?

Hab. in foliis *Diapensiæ lapponicæ*, in Lapponia (HELLBOM).

19. *Physalospora Crepiniana* Sacc. et March. Revue Myc. (1885) 3580

p. 145 — Teste Rehm, Ann. Mycol. VI (1908) p. 320 huc spectant: *Physalospora alpina* Speg. var. *Crepiniana* Sacc. Syll. IX, p. 594 et *Physalospora Empetri* Rostrup, Sacc. Syll. XVII, p. 583 — tamen species variat ascis nunc 100-110 \times 10-15, nunc 60-70 \times 15 et sporidiis modo 20-26 \times 10-11 et modo 15-18 \times 7-9.

20. *Physalospora Rhododendri* Naumann, Jahresb. d. Ver. f. angew. 3581

Bot. 1909, Berlin (1910) p. 161. — Peritheciis erumpentibus, epiphyllis, 140 μ . lat., 120 μ . alt.; ascis subteretibus 80 μ . longis, octosporis; sporidiis obovatis (lacrimi-formibus) continuis, 20 \times 8, hyalinis.

Hab. in foliis *Rhododendri* specierum cultarum in Germania. Folia infecta arescunt et exsiccantur, gemmæ moriuntur et tunc totus ramus perit.

21. *Physalospora leptidea* (Hazsl.) Sacc. et Trott., *Læstadia leptidea* 3582

Hazsl. Sphær. Hung. pag. 115, t. VI, f. 27, vix *Sphæria leptidea* Fr. Ofr. Syll. I, p. 535 et III p. 111. — Peritheciis globosis, erumpenti-superficialibus, nigris papillulatis, hypophyllis; ascis clavatis, apice obtuse rotundatis, deorsum breviter tenuato-stipulatis, octosporis, 16 μ . cr., paraphysibus copiosis filiformibus, ascum paullo superantibus obvallatis; sporidiis distichis v. subdistichis ellipsoideo-oblongis, obtusolis, 14-16 \times 4, continuis, hyalinis.

Hab. in foliis *Vaccinii Vitis-idææ* in Hungaria. — Paraphyses copiosissimæ, hinc non *Læstadia* (= *Guignardia*).

22. *Physalospora Vitis-idææ* Rehm, in Krieger Ann. Mycol. IV (1906) 3583

p. 40. — Peritheciis in hypophyllo minutato gregariis verrucosominutis, globosis, papillula conoidea solum prominente, glabris,

nigris, 150 μ . diam, excupulo tenui fusco parenchymatico-contexto, ad ostiolum subfimbriato; ascis, fusiformibus, teneris, 90-120 \times 20, octosporis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, hyalinis, 18-20 \times 9-10, strato mucoso tenui obductis, distichis; paraphysibus filiformibus, septatis, 3 μ . cr., non gelatinosis.

Hab. ad folia *Vaccinii Vitis*-idææ prope Königstein Germaniæ. — *Physalospora alpina* Speg. affinis.

23. *Physalospora Rhododendri* (De Not.) Rehm, Ann. Mycol. V (1907) 3584 p. 536. — Ita vocandæ, teste Rehm, *Sphaerella Rhododendri* De Not. Sf. ital. p. 86, t. 96, seu *Læstadia Rhododendri* Sacc. Syll. f. I, p. 428 et *Physalospora alpina* Speg., Sacc. Syll. I, p. 436. — Sporidia variant 35-48 \times 8-12; paraphyses ramosæ. — Nascitur species frequens quoque in Alpibus Tiroliae ad folia *Rhododendri ferruginei* (REHM).

24. *Physalospora populina* Maubl., Bull. Soc. Myc. Fr. XXIII (1907) 3585 p. 141. — Peritheciis innatis, sparsis, peridermio pustulato elevato tectis, intus pallide roseis, depressis, poro minuto, non prominulo pertusis, 250 \times 175; ascis clavato-cylindraceis, sessilibus, apice tenuatis, 69-75 \times 11-15, octosporis; paraphysibus initio numerosis, granulatis, septatis, 2,5-3 μ . cr., demum diffluentibus; sporidiis distichis, inferne monostichis, ellipsoideis v. oblongis, interdum inaequilateris, utrinque obtusis, primo grosse biguttatis, demum nubiloso-guttulatis 14-20 \times 5-7; pycnidiis (*Phoma Maublanci* Sacc. et Tr.) globosis v. depressis, immersis, dein peridermio rupto semi-erumpentibus, poro pertusis, 225 μ . diam.; sporulis hyalinis ovoideis, 2-guttatis, 5-7 \times 2,5-3; sporophoris brevibus, vix conspicuis.

Hab. in ramulis emortuis Populi carolinianæ pr. Toulouse Galliæ.

25. *Physalospora Salicis* (Fuck.) Sacc. Syll. I, p. 439 — var. *gregariella* Sacc. Ann. Mycol. VII (1909) p. 435. — Peritheciis late densiuscule gregariis; ascis tereti-fusoideis, 50 \times 8; sporidiis oblongo-ellipsoideis, 14 \times 4-5.

Hab. in ramis morientibus *Salicis vitellinæ*, Eichwalde pr. Berolinum (H. SYDOW).

26. *Physalospora Elasticæ* Koord., Botan. Untersuch., (1907) p. 191 3587 fig. 18, I. — Peritheciis epiphyllis, sparsis v. gregariis, tectis ostiolo papillato erumpente, coriaceis, atris, glabris, discretis, 60-90 μ . diam.; ascis tereti-clavatis, paraphysatis, 40-55 \times 15-16, octosporis, fasciculatis, paraphysibus filiformibus, numerosissimis, hyalinis, 80 μ . longis, indivisis, continuis; sporidiis continuis, hyali-

nis, oblongis, utrinque rotundatis, rectis v. subrectis (haud allantoideis) $13-18 \times 5-6$.

Hab. in macula foliorum *Fici elasticæ* in insula Java (KOORDERS).

27. *Physalospora gregaria* Sacc. Syll. I, p. 435 — f. *Taxi* Feltg. 3588 Vorst. Pilz-Fl. Luxemb. IV (1905), p. 56. — A typo recedit peritheciis subsparsis nec gregariis, non emergentibus, sporidiis paullo brevioribus et crassioribus, $15-22 \times 7-10$, subovoideis.

Hab. in apice ramulorum *Taxi baccatæ* in Luxemburgia. Perithecia $150-200 \mu$. diam.; asci $70-110 \times 15-20$.

28. *Physalospora Phaseoli* P. Henn., Syll. XVII, p. 580 — var. 3589 *guatemalensis* Rehm in Kellerman Journ. of Mycol. XIV (1908) p. 4. — Maculis orbicularibus luteolis, 1-3 cm. latis, demum confluentibus; peritheciis dispersis, globulosis, nigris, demum hemisphaerice prominentibus, $0,15-0,2$ mm.; ascis $70-80 \times 12$; sporidiis oblongo-orbicularibus 9×8 , monostichis; paraphysibus filiformibus $1,5 \mu$. cr.

Hab. in foliis plantæ ignotæ prope Guatemala Amer. centr. (KELLERMAN).

29. *Physalospora obtegens* Rehm, Ann. Mycol. V (1907) p. 524. — 3590 Peritheciis gregariis totum stipitem obtegentibus, innatis sub epidermide haud mutata, globulosis papillula minutissima prominentibus, atris, basi hyphis crebris ramosis septatis $3-5 \mu$. cr. fuscis obsessis, 120μ . diam., membranaceo-contextis; ascis oblongis, apice rotundatis, $60-65 \times 18$, octosporis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus interdum guttam 1 oleosam magnam includentibus, hyalinis, $18 \times 8-9$, distichis; paraphysibus ramosis, teneris.

Hab. in arbore ignota vulgo « Achete », Sao Leopoldo, Rio Grande do Sul, Brasilæ (RICK). — Habitus *Sphaerellæ*.

30. *Physalospora sanguinea* Rehm, Ann. Mycol. V (1907) p. 524. — 3591 Maculis amphigenis, orbicularibus, demum oblongis, in epiphylllo primitus sanguineis, distincte nigrosanguineo-marginatis, demum expallescentibus, planis, in hypophyllo item marginatis et bulbosoprominentibus, ochraceis, $0,5-1,5$ cm. diam.; peritheciis in hypophyllo gregariis innatis globulosis nigris apice vix prominentibus, poro haud conspicuo, parenchymatico-fusco-contextis, 180μ . diam.; ascis fusiformibus, apice rotundatis, sessilibus, teneris, $60-65 \times 8-9$ 8-sporis; sporidis oblongis, rectis, utrinque rotundatis, 1-cellula-

ribus, hyalinis, 10-12 \approx 3,5 distichis; paraphysibus teneris, filiformibus, septatis.

Hab. in folio coriaceo in horto botan., Sao Paulo, Brasiliæ (USTERI). — Affinis videtur *Phys. juruancæ*.

31. **Physalospora Lapageriæ** Speg., Fungi Chilenses (1910) p. 33 cum 3592
 icon. — Maculis nullis v. obsoletis; peritheciis laxè gregariis amphigenis innato-superficialibus minutis atris glabris submembranaceis, 100-125 μ . diam.; ascis subellipsoideis brevissime pedicellatis, 50-60 \approx 16, pseudoparaphysibus percrassis longioribus obval-latis, 70-80 \approx 10-12; sporidiis distichis, ellipsoideis hyalinis 16 \approx 8.

Hab. in foliis siccis *Lapageriæ roseæ* in silvis Cerro Caracol Concepcion Chile Amer. austr.

32. **Physalospora Orchidearum** P. Henn., Hedw. XLIV (1905) p. 170. 3593
 — Peritheciis innatis, vertice atro-nitenti erumpentibus, membranaceis, c. 140-180 μ . diam.; ascis clavatis vel subfusoides, apice rotundatis, 8-sporis, 50-70 \approx 8-12; paraphysibus filiformibus, hyalinis; sporidiis subdistichis cylindraceis, utrinque obtusis, rectis vel curvulis, 2-guttulatis, continuis, hyalinis, 15-18 \approx 4-5.

Hab. in caulibus emortuis *Tainiæ stellatæ* et *Læliæ Schillerianæ* in horto bot. Berolinensi.

33. **Physalospora amphidyma** H. et P. Syd., Ann. Mycol. III (1905) 3594
 p. 184. — Maculis amphigenis, suborbicularibus, 3-5 mm. diam., albidis, bene linea rufo-purpurea elevata cinctis; peritheciis in utraque folii parte conspicuis, sparsis, minutis, punctiformibus, diutius tectis, vertice demum tantum erumpentibus, sed vix vel haud prominulis, globosis, atris, glabris, 100-140 μ . diam.; ascis clavato-cylindraceis, apice attenuatis, subsessilibus, 45-55 \approx 9-11, octosporis; sporidiis oblique distichis, oblongo-ellipsoideis, utrinque leniter attenuatis, continuis, hyalinis, 13-18 \approx 3 $\frac{1}{2}$; paraphysibus filiformibus, ascos æquantibus.

Hab. in foliis vivis *Dracænæ* Papahu, pr. Amani Africae orient. (A. KARASEK).

34. **Physalospora Dracænæ** Sheldon, Journ. of Mycol. XIII (1907) 3595
 p. 140. — Stat. conid. *Glæosporii* sp. — Acervulis plerumque epiphyllis, fuscis, conidiis in massulas rubentes erumpentibus; peritheciis sphaericis v. subphialiformibus et rostellatis, nigris; ascis filiformi-paraphysatis, clavatis; sporidiis conidiis similibus sed leviter curvis.

Hab. in foliis, quæ exsiccantur, *Dracænæ* fragrantis in

calidariis. Virginiae Amer. bor. — Diagnosis imperfecta. Ob perithecia subrostrata potius *Glomerellæ* species.

35. *Physalospora antarctica* P. Henn., Deutsche Südpolar-Exped. 3596 VIII (1906) p. 10, t. II, f. 5 (extr.). — Peritheciis sparsis, innatis, ostiolo erumpentibus, ovoideis, fuscis, membranaceis, 65-80 μ . diam.; ascis clavatis, apice rotundatis, octosporis; 25-30 \times 5-7; paraphysibus filiformibus, obtusis, hyalinis, 1,5 μ . cr.; sporidiis subdistichis, fusoides, utrinque acutiusculis, interdum 3-guttulatis, hyalinis, 10-15 \times 2,5-3,5.

Hab. in foliis Junci scheuchzerioidis in insula Possession et Kerguelen pr. polum australem (E. VANHOEFFEN et E. WERTH).

36. *Physalospora Moliniæ* Kirschst., Verh. Bot. Ver. Brandenb. 3597 XLVIII (1906) p. 55. — Peritheciis dense gregariis, minutis, globosis, nigris, breve rostellatis, immersis, dein paullo emergentibus; ascis clavatis, breve stipitatis, 40-50 \times 5-6, octosporis; sporidiis oblique monostichis, v. distichis, fusoides, acutatis, leniter inæquilateris, continuis, 8-12 \times 4-5, hyalinis; paraphysibus filiformibus!

Hab. prope basim culmi emortui sed adhuc stantis Moliniæ cæruleæ, Rathenower Stadtforst, Brandenburg.

37. *Physalospora amianticola* Vouaux ap. Lesdain, Bull. Soc. bot. 3598 Fr. LVI (1909) p. 3. — Peritheciis vel tectis, vel emergentibus v. fere superficialibus, sparsis, membranaceo-carbonaceis, poro minimo simplici præditis 200 μ . diam., contextu pseudoparenchymatico, cellulis 3-4 μ . diam. fuscis; ascis, cylindraceis 4-8-sporis, 120 \times 12; sporidiis ellipsoideis, hyalinis, continuis, 20-22 \times 8-9, biserialis, sæpe irregulariter multiguttulatis; paraphysibus agglutinatis.

Hab. in amianto contextu aëri diu exposito pr. Versailles Galliae.

38. *Physalospora Citharexyli* Rehm in Hedw. XL (1901) pag. 112, 3599 t. VI, f. 42 et in Rab.-Pazschke, F. Eur. n. 4161 (nomen nudum).

Hab. ad folia viva Citharexyli sp. in Brasilia (ULE). — Ex icone sporidia ellipsoidea, utrinque subtenuato-rotundata, 15-17 \times 5-6, hyalino-farcta, non guttata.

UROSPORELLA Atkins. — Syll. XIV p. 523.

1. *Urosporella argentinensis* Speg., An. Mus. Nac. Buenos Aires. 3600 t. XIX (1909) p. 335, cum icon. — Matrice omnino denudata obsolete vageve infuscata; peritheciis superficialibus vix basi inscul-

ptis (an primo epidermide velatis?) sparsis v. subseriatis, modice papillato-ostiolatis 150 μ . diam., membranaceo-coriacellis, contextu indistincto atro; ascis utrinque subattenuatis antice truncatis postice breviuscule crassiusculeque pedicellatis 115-125 \times 8-9, octosporis, paraphysibus filiformibus vix longioribus parvis obvallatis, sporidiis oblique monostichis non v. leviter inaequilateralibus 14-16 \times 7, hyalinis, semper grosse 1-v. 2-guttulatis (an initio tunica mucosa tenui vestitis?), utrinque 1-ciliatis, ciliis rectis 6-10 μ . long. rigidulis concoloribus.

Hab. ad caules aridos *Echii plantaginei* prope La Plata, Argentina Amer. austr. — An ab *U. americana* Atk. satis distincta?

TRABUTIA Sacc. et Roum. — Syll. I p. 449, IX p. 601, XI p. 293, XVI p. 463, XVII p. 587.

1. **Trabutia Erythrinæ** Riek in Ann. Mycol. III (1905) p. 239. — 3601
Stromate atro, clypeato, 1-2 mm. lato, sæpius confluenta, orbiculari, depresso, ostiolo exserto, ramos ambiente; ascis elliptico-clavatis, breviter et anguste pedicellatis, octosporis, 50-60 \times 25; sporidiis hyalinis vel olivaceis, ellipticis vel rectangularibus, granulis repletis, 20-25 \times 12-15; paraphysibus hyalinis.

Hab. in ramis *Erythrinæ* *Cristæ-Galli* in Brasilia. —
— Est *Trabutia* habitu dothideaceo.

2. **Trabutia Molleriana** Da Camara, Bol. Soc. Broteriana, XXV (1910) 3602
Extr. p. 6. — Peritheciis suborbiculatis v. globoso-depressis, subcarbonaceis, nigris in stromate erumpenti linearique immersis, modo gregariis, modo solitariis, (habitu fere sclerotioideo), ostiolo rotundo, minuto; ascis plus minus claviformibus, interdum cylindraceis, medio inflatis, non v. vix stipitatis, octosporis, 50-60 \times 8-10; sporidiis distichis, ellipsoideis, continuis, hyalinis, grosse biguttulatis, utrinque rotundatis, 10-12 \times 5-6.

Hab. in foliis *Iridis* sp. in horto botanico Coimbra Lusitaniæ (A. MOLLER).

WALLROTHIELLA Sacc. — Syll. I p. 455, IX p. 605, XI p. 294, XIV p. 524, XVI p. 465, XVII p. 587.

1. **Wallrothiella merdaria** Karst., Acta Soc. Fauna et Fl. fenn. XXVII, 360
4 (1905) p. 7. — Peritheciis confertissimis matrici laxè adherentibus, sphaeroideis, atris, opacis, astomis, forte demum pertusis, parvis; ascis tereti-clavatis; sporidiis distichis v. submonostichis,

ellipsoideis, hyalinis, eguttatis, 17-20 \times 8-10; paraphysibus laud discretis, flavescens, asci longitudine.

Hab. supra merdam humanam in sacellania Willnäs Fenniae.

TRICHOSPHERIA Fuck. — Syll. I p. 452, IX p. 602, XI p. 293, XIV p. 523, XVI p. 463, XVII p. 588.

1. **Trichosphæria paraënsis** Syd., Hedwigia XLIX (1909) p. 79. — 3604

Peritheciis sparsis, in mycelio atro effuso superficialibus, ovato-globosis, atris, coriaceo-carbonaceis, tandem collabescentibus, 200-300 μ . diam., setis rigidis atris apicem versus acutis, 70-125 μ . longis, 6-10 μ . crassis; mycelio repente, effuso, ex hyphis ramosis septatis fuscis 6-10 μ . crassis, conidia obclavata multiseptata fusca in flagellum perlongum dilutius producta tota usque ad 175 μ . longa et basi usque ad 18 μ . crassa gerentibus composito; ascis cylindraceo-clavatis, obtusis, p. sp. 45-62 \times 16-21, stipite usque ad 40 μ . longo et c. 7 μ . crasso suffultis, octosporis; sporidiis irregulariter distichis late ellipsoideis, utrinque rotundatis, continuis, hyalinis, intus nubilosis, 15-20 \times 7-10.

Hab. in ramis emortuis *Stenocalycis brasiliensis*, Para Brasiliæ (C. F. BAKER).

2. **Trichosphæria vagans** Boud. Ic. myc. III (1910) t. 574 (Ser. I, p. 2). 3605

— Atra, glabra, sed in subiculo mycelioso longe lateque expanso numerosim congesta; peritheciis turbinatis, vertice papillatis et circa otium sæpe depressis; ascis numerosis, clavatis ad basim attenuatis, octosporis 70-80 \times 10-12; sporidiis oblongo-fusoides, hyalinis, sæpius intus 4-guttulatis, 15-19 \times 4-5.

Hab. ad basim trunci *Cratægi Oxyacanthæ*, ad terram, Montmorency Galliae.

3. **Trichosphæria interpilosa** Fairm., Proc. Rochest. Ac. of Sc. IV 3606

(1906) p. 219. — Peritheciis sparsis, minutis, ovoideo-globosis, parce pilosis; pilis atro-brunneis, sursum dilutioribus; ostiolo minute papillato; ascis tereti-clavatis, 77-93 \times 10, octosporis; sporidiis oblique monostichis ex ovoideo oblongis, continuis, granulosis, 13-14 \times 6-7, interdum (ob pressionem) subsigmoideis, hyalinis.

Hab. in lignis putridis, Lyndonville N. Y. Amer. bor. — Perithecia subiculo obsoleto et inter pilos erectos brunneos inserta.

4. **Trichosphæria javensis** v. Höhn., Stzb. k. Ak. d. Wiss. Wien 3607

CXVIII (1909) pag. 335. — Peritheciis superficialibus, sparsis, opace nigris, ovoideis breve conoideis, 300 μ . diam., infra glabris,

supra setulosis; setulis 10-15, brunneolis, 5-10-septatis, rigidulis, apice acutis obtusisve, pallidioribus 120-240 \approx 10-14 (basi); contextu atro-brunneo, cellulis polyedricis 7-8 μ . diam.; ascis aparaphisatis, teneris, clavatis, apice truncato-conoideis, deorsum in stipitem 30 μ . long. productis, octosporis, 80-100 \approx 16; sporidiis subdistichis ellipsoideis, continuis, 12-14 \approx 7-8, diu hyalinis, demum dilute brunneolis, grosse 1-guttatis.

Hab. in corticibus vivis arborum pr. Tjibodas ins. Javæ.

5. *Trichosphæria cupressina* Rehm, Ann. Mycol. III (1905) p. 520 8608
et V (1907) p. 517. — Peritheciis dispersis sessilibus, globulosis 270 μ . diam., parenchymatico-contextis fusco-membranaceis, ubique setis rectis, glabris, acutatis, subfuscis, dispersis 120 \approx 4-6 (ad basim) obsessis, nigris, basi hyphis nonnullis longis fuscis cinctis; ascis clavatis, apice rotundatis, 70-80 \approx 15-18, 8-sporis; sporidiis fusiformibus vel subclavatis, altero apice rotundatis, interdum subcurvatis, 1-cellularibus, guttas oleosas 1-2 magnas includentibus, hyalinis, 18-24 \approx 6-7, distichis; paraphysibus filiformibus, septatis.

Hab. ad folia Cupressi thyoidis, Newfield, N. Jersey Am. bor. (ELLIS). — *Trich. regulinæ* affinis.

6. *Trichosphæria bambusina* v. Höhn., Stzb. k. Ak. d. Wiss. Wien 8609
CXVIII, Abt. I (1909) p. 336. — Peritheciis superficialibus, subiculo albo tenuissimo insertis, in greges minutos crebros dispositis, nigris, membranaceo-carbonaceis, globosis, 80-90 μ . diam., circulariter setosis, setulis rariusculis, continuis, acutis conico-tenuatis, rigidis, atro-brunneis, 20-32 \approx 3-5, vertice areolam nudam ostiolo minuto pertusam relinquentibus; ascis aparaphysatis, sessilibus, fusoideo-clavatis, octosporis, teneris, 24-28 \approx 4-5,5; sporidiis distichis, oblongo-teretiusculis, rectis, v. curvulis, utrinque obtusulis, hyalinis, 4-guttulatis (simulate 4-cellularibus), 6-7 \approx 1,5-2.

Hab. in culmis emortuis Bambusæ, Tjibodas ins. Javæ. — Subiculi hyphæ 1-2 μ . cr.

MIYOSHIA Kawamura, Journ. of Coll. of Sc. Imp. Univ. Tokyo v. XXIII (1907) fasc. II, tab. 1-5. (Etym. a professore japonico M. MIYOSHI). — Peritheciis subiculo nigro inserta, atra, subcarbonacea, brunneo-pilosa, globoso-conoidea, papillato-ostiolata. Asci elongati, paraphysati, octospori. Sporidia fusoidea, continua, hyalina, levia. — Adsunt conidia clavato-cylindracea, pluriseptata *Clasterosporii* ad instar.

1. *Miyoshia fusispora* Kawamura l. c. Charact. gen. — Subiculi hy- 8610

phis septatis, brunneis, laxis, subsimplicibus; peritheciis piriformibus, 500-600 \approx 250-350; ascis cylindraceis deorsum breviter tenuato-stipitatis, paraphysibus filiformibus, parce septatis obvallatis, octosporis; sporidiis oblique monostichis, fusoides rectis vel vix curvulis, utrinque acutulis, hyalinis, 28-33 \approx 6-8, 1-guttulatis granulosisque; conidiis variis 50-120 \approx 5-15, brunneis, dense et crasse multiseptatis.

Hab. in foliis Arundinariæ Narihira, quæ tigrino-maculantur, in Japonia.

BOTRYOSPHERIA Ces. et De Not. — Syll. I p. 456, IX p. 605, XI p. 295, XIV p. 524, XVI p. 467, XVII p. 590.

1. **Botryosphæria Berengeriana** De Not. — Syll. I, p. 457 — var. 3611
acerina Rehm, Ann. Mycol. VII (1909) p. 533. — Soris in rimis corticis interioris vetusti longe elongatis, 0,5-2 cm. longis, cortici denigrato innatis; peritheciis gregariis v. singularibus, dein emergentibus, papillulatis, poro pertusis, 0,5 mm. diam., foveolam atram denique relinquentibus. Ceterum ut in specie ipsa.

Hab. in ramis corticatis Aceris macrophylli, Washington Amer. bor. (E. T. et S. A. HARPER).

2. **Botryosphæria Jasmini** Chenant. in Bull. Soc. Sc. nat. Ouest France (1910) p. 14, t. IV, f. 3. — Peritheciis minutis ex matrice nigrificata seriatim erumpentibus v. in matrice intacta insidentibus, sphæroideis, nigris, granulosis; ostiolis papillatis, conicis, obtusis; ascis stipitatis, clavatis v. cylindraceis apice, incrassatis, pseudoparaphysibus articulatis obvallatis, 7-8-sporis; sporidiis distichis v. oblique monostichis, ellipsoideo-trigonis, inæqualibus, continuis, granulatis, hyalinis, 30-37 \approx 12-16, demum (extra ascos) 1-2-septatis, dilutissime aureis, ad septa subconstrictis.

Hab. in cortice Jasmini officinalis, villa Kernevèz, Monterelaxo in Gallia.

3. **Botryosphæria melioides** Rehm, Ann. Mycol. V (1907) p. 524. 3613
— Peritheciis epiphyllis in folii superficie haud mutata in stroma orbiculare 2-3 mm. diam. usque ad 50 arcte congregatis, globulosis, atris giabris, poro perspicuo pertusis, siccis apice umbilicatis, 100-150 μ . diam., parenchymatice contextis; ascis clavatis, apice rotundatis incrassatisque, 60-65 \approx 15-17, 8-sporis; sporidis ellipsoideis utrinque obtusis, 1-cellularibus, hyalinis, 10-11 \approx 5-5,5, distichis; paraphysibus filiformibus 2,5 μ . cr.

Hab. ad folia Compositæ (? Vernoniæ), Sao Paulo Bra-

siliæ (USTERI). — Habitus quasi *B. phyllachoroides*. In stromate occurrunt conidia 4-cellularia, hyalina, 20×3 (speciei propria?).

4. **Botryosphæria Phormii** Speg., Ann. Mus. Nac. Buenos Aires 3614 t. XIX (1909) p. 335. — Matrice laxè effuseque dealbata; peritheciis stromate pusillo constipatis, globosis, minutis, $120-130 \mu$. diam. atris, contextu indistincto opaco; ascis antice obtusissimis crasseque tunicatis, postice breviter noduloseque pedicellatis, $60-65 \times 20$, octosporis, paraphysibus densis submucosis cinctis; sporidiis distichis utrinque acutiuscule rotundatis, $18-20 \times 7-9$ leniter inaequalibus, grosse 1-guttulatis hyalinis.

Hab. ad scapos florales *Phormii* tenacis in hortis La Plata, Argentina Amer. austr.

Sect. 3. Phæosporæ.

MÜLLERELLA Hepp — Syll. IX p. 495, XVII p. 593.

1. **Müllerella polyspora** Hepp — Syll. IX, p. 485. — var. *micro-* 3615
spora Ferr., Malpighia XX (1906) p. 141. — A typo dignoscitur sporidiis multo minoribus et non guttulatis.

Hab. in apotheciis *Biatoræ* luteolæ ad corticem *Quercus*, Alba Ital. bor. (Doct. G. FERRO). — Perithecia $120-140 \times 84$; asci $50-60 \mu$. longi, clavati; sporidia numerosissima, $2,5-3 \times 2$.

PHÆOPHOMATOSPORA Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) pag. 339 (Etym. *phæos* fuscus et *Phomatospora*). — Est *Phomatospora* sporidiis fuliginis prædita.

1. **Phæophomatospora argentinensis** Speg., l. c. p. 339, cum icon. — 3616
Matrice sæpius late irregulariterque infuscata; peritheciis minutissimis submembranaceis epidermide tectis dense gregariis, glabris, $90-100 \mu$. diam., ostiolo minuto impresso perforatis; ascis cylindraceis, brevissime pedicellatis, aparaphysatis, $70 \times 6-8$; sporidiis oblique monostichis, ellipsoideo-navicularibus, parvulis, subopacis, $10-12 \times 4-5$.

Hab. ad caules aridos subputrescentesque *Conii* maculati in arvis circa Santa Catarina, Buenos Aires, Rep. Argentina Amer. austr.

ANTHOSTOMELLA Sacc. — Syll. I p. 278, IX p. 505, XI p. 281, XIV p. 501, XVI p. 439, XVII p. 594.

1. **Anthostomella Sullæ** Montemartini, Riv. Patol. vegetale IV (1910) 3617 p. 166. — Simplex; peritheciis gregariis, majusculis, submembranaceis, contextu distincto parenchymatico, globosis, 300-500 μ ., ostiolo brevi conoideo superficiem attingente, peridermio circa ostiolum vix erumpente denigrato tectis; ascis cylindraceutis, 70-75 \times 8-9, breviter stipitatis, apice rotundatis, octosporis, paraphysatis; sporidiis oblique monostichis, utrinque rotundatis, continuis, olivaceo-fuscis, 13 \times 7,5, paraphysibus filiformibus, continuis, intus granulosis, ascos æquantibus.

Hab. in foliis vivis Hedysari coronarii (vulg. *Sulla*) Rimini, Italiæ mediæ. — Socia forma pycnidica: *Leptothyrium Sullæ* S. et T.: Maculis nigris; pycnideis simplicibus, scutiformibus, membranaceo-atris, epidermide atrata et irregulariter erumpente tectis; sporulis limoniformibus, minutis, 3-4 \times 2.

2. **Anthostomella Cassinopsidis** Rehm, Ann. Mycol. IV (1906) p. 441 3618 et V (1907) p. 545. — Peritheciis gregariis, innatis, epidermidem denigratam hemisphærice elevantibus, semper obtectis, modo papillula minuta poro perspicuo pertusa prominente, globosis, glabris, atris, carbonaceis, 1 mm. diam.; ascis cylindraceutis, apice rotundatis, 300 \times 12-15, 8-sporis, jodii ope haud cæruleo-tinctis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, subfuscis, 18-20 \times 8-9, strato mucoso tenui obductis, 1-stichis; paraphysibus ramosis, septatis, 3 μ . cr.

Hab. ad ramulos Cassinopsidis ad Promontorium Bonæ Spei (MAC OWAN, comm. Dr. PAZSCHKE). — Affinis *Anth. africanae* et *Anth. Unedonis*.

3. **Anthostomella ? Lingue** Speg., Fungi Chilenses (1910) p. 37 cum 3619 icon. — Peritheciis subglobosis matrici infossa pauci-gregariis clypeo epidermico nigro nitido tectis, 120-150 μ . diam.; ascis linearibus octosporis 100-120 \times 5, paraphysibus nullis; sporidiis elliptico-subfusoides utrinque acutis, pallide olivaceis, 11-13 \times 3-4.

Hab. in foliis putrescentibus Perseæ Lingue prope Ciudad de Valdivia Chile Amer. austr. — Forsan forma *Læstadiæ* (Guignardiæ) *Lingue* Speg.

4. **? Anthostomella Bonanseana** Sacc., Ann. Mycol. VI (1908) p. 567. 3620 — Peritheciis gregariis, subcutaneo-erumpentibus, membranaceo-coriaceis, nigris, globosis, 200 μ . diam., apice obtusis ostioloque irregulariter circulari pertusis, contextu dense celluloso; ascis... non visis; sporidiis globosis levibus, atro-fuligineis, 7,5-8,5 μ . d.

Hab. in magnis ulceribus elevato-discoideis nec non circum ea

ad caules *Cerei* geometrizzantis, Apaseo, Guanasirato Mexici, Junio 1908 (BONANSEA). — Etsi ascos nullos viderim, species potius *Anthostomella* quam *Sphæropsis* mihi videtur.

5. *Anthostomella bahiensis* (Hempel) Speg., in Rev. Facult. de Agro- 36
nomia y Veterinaria, Buenos Aires II (1906) p. 304 et 310, f. A, *Calonectria bahiensis* Hemp. in Bol. da Agricult., n. 1. Janeiro (1904). — Peritheciis solitariis v. sæpius gregariis subseriatis, cortice immutato innato-subsuperficialibus, hemisphærico-conoideis, 1-1,5 mm. diam., 0,7 mm. alt., nigris nitidulis, ostiolo obsoleto demum perforatis, basi subapplanatis, carbonaceis, nucleo mucoso, demum pulverulento; ascis fugacissimis, fusoides-subelavulatis, apice rotundatis, deorsum breviter cuneato-stipitatis, $200 \approx 35-40$, sæpius hexasporis, aparaphysatis (?); sporidiis distichis, rhomboides-ellipticis v. subnavicularibus, utrinque obtusulis, $60-70 \approx 20-30$, continuis, levibus, opace nigris.

Hab. ad ramos *Theobromæ* Cacao, Bahia Brasiliæ. — Habitus lichenoides, sed gonidia et thallus nulli.

6. *Anthostomella Arthrophylli* Koord. Botan. Untersuchung. (1907) 362
pag. 195, fig. 18 IV. — Peritheciis 1-4 in maculis orbicularibus parvis insidentibus, coriaceo-carbonaceis, glabris, globoso-depressis, peridermio circa ostiolum vix erumpens denigrato tectis, $120-150 \mu$. diam.; ascis oblongis, apice haud incrassatis $30-40 \approx 10-16$ octosporis, paraphysatis; sporidiis continuis, fuligineis, muticis, ovoides-oblongis, $15-22 \approx 7-10$, utrinque rotundatis, prope apicem transverse hyalino-annulatis.

Hab. in foliis *Arthrophylli* diversifolii prope Kaliwiro prov. Kedu insulæ Javæ, sept. 1905 (KOORDERS).

7. *Anthostomella subconica* Rehm, Ann. Mycol. V (1907) p. 537. — 362
Peritheciis in caule plerumque haud denigrato dispersis vel gregariis, innatis, nigro-tectis, globulosis, ostiolo conico prominentibus, 0,5 mm. latis; ascis cylindræis, apice rotundatis, $100-110 \approx 10$, 8-sporis; sporidiis ellipsoideis, sæpe navicularibus, utrinque subacutatis, 1-cellularibus, crasse 2-guttatis, fuscis, strato mucoso tenui obductis, $10-12 \approx 5-7$, 1-stichis; paraphysibus filiformibus, 3μ . crassis.

Hab. ad caules siccos ? *Compositæ* in silva ad Kampenwand alpium Baviaræ (Dr. REHM). — Peritheciis majusculis et sporidiorum forma et magnitudine a ceteris speciebus caulicolis videtur distincta.

8. *Anthostomella megaclypeata* Rehm, Ann. Mycol. V (1907) p. 537. 362

— Caulibus late extus denigratis; peritheciis gregariis, clypeiformiter atratis, innatis, conoideo- vel hemisphaerico-prominentibus, globulosis, ostiolo subconico brevi perspicuo poro pertuso, ca. 0,4-0,7 mm. latis; ascis cylindraceis, 100-120 \times 10, octosporis; sporidiis ovoideis vel oblongis, utrinque obtusis, 1-cellularibus, fuscis, strato mucoso tenui obductis, 12-14 \times 7, monostichis; paraphysibus filiformibus.

Hab. ad caules putrescentes Labiatae in faucibus infra Kastelruth Tirolia austr. (Dr. REHM). — Peritheciis majusculis, demum in matrice foveolam relinquentibus, sporidiorumque forma facile dignoscitur.

9. **Anthostomella destruens** Shear, Bull. Torr. Bot. Club. XXXIV 3625 (1907) p. 313. — Peritheciis gregariis, submembranaceis, globosis v. subpiriformibus, 350-450 μ . diam., pro more vertice in ostiolum latiusculum pertusum productis; ascis octosporis, cylindraceis, subsessilibus, 200-232 \times 15-18, aparaphysatis; sporidiis breviter ellipsoideis subinde inaequilateralibus, monostichis, primo hyalinis, dein flavo-brunneis, demum atro-brunneis, opacis, 16-24 \times 10,5-12.

Hab. ad ramos ægros Vaccinii macrocarpi, New Jersey et inde culta. — Paraphysibus deficientibus a typo generis desciscit.

10. **Anthostomella Osyridis** Bubák, Bull. Herb. Boiss. 2 sèr. VI (1906) 3626 p. 402. — Peritheciis sparsis v. 2-3 confertis et ramos late occupantibus, cortice innatis, diu tectis, globosis, 70-130 μ . diam., ostiolo papillato erumpentibus et pro more clypeo atro cinctis; contextu laxo celluloso extus nigro, intus subolivaceo; ascis in quoque perithecio paucis oblongo-clavatis, apice tenuato-rotundatis, breviter abrupte pedicellatis, 60-80 \times 16-18, octosporis; sporidiis elliptico-fusoides, 17-20 \times 5-6, utrinque rotundatis, late castaneis, in asco superne monostichis, infra irregulariter positiss, unicellularibus.

Hab. in ramulis emortuis Osyridis albæ, Ulcinj Montenegro.

11. **Anthostomella Elasticæ** Koord., Botan. Untersuch. (1907) p. 195, 3627 fig. 19 II. — Maculis nullis; pseudostromate vix conspicuo; peritheciis tectis, sparsis, coriaceo-carbonaceis, glabris, globosis, 120-150 μ . diam., epiphyllis, ostiolo breviusculo epidermidem perforante; ascis anguste vel crassiuscule cylindraceis, apice haud incrassatis, 60-65 \times 5-10, aparaphysatis, sessilibus, tenuibus, mox evanescentibus; sporidiis continuis, atro-fuligineis, ellipsoideis, inæ-

quilateralibus; utrinque acutis, oblique monostichis, appendiculis, destitutis, 13-14 \approx 6-8.

Hab. in foliis putrescentibus Fici elasticæ prope Loano prov, Kedu ins. Java, majo 1906 (KOORDERS).

12. **Anthostomella Sequoiæ** Rehm, Ann. Mycol. V (1907) p. 525. — 3628

Peritheciis in maculis denigratis 1-2 mm. lat., demum late confluentibus innatis, plerumque singularibus, globulosis, subprominentibus, poro perspicuo pertusis, haud papillulatis, nigris, glabris, 0,5 mm. lat.; ascis cylindraceutis, 100 \approx 7, apice rotundatis, 8-sporis; sporidiis ellipsoideis, plerumque navicularibus, 1-cellularibus, 1-2-guttatis, fuscis, strato tenui mucoso obductis, 10-12 \approx 4-5, 1-stichis; paraphysibus filiformibus.

Hab. ad folium siccum Sequoiæ, Sao Leopoldo, Rio grande do Sul, Brasilia (Rick S. J.). — *A. leucobasi* proxime affinis.

13. **Anthostomella Distachyæ** Maubl., Bull. Soc. Myc. Fr. XX (1905) 3629

p. 87, tab. VI, fig. 1. — Peritheciis sparsis, atris, innatis, globosis, epidermide punctiformi-nigrificata tectis, 500 μ . diam., ostiolo brevi vix erumpentibus; ascis cylindricis, breviter stipitatis, 120-125 \approx 12-13, filiformi-paraphysatis; sporidiis monostichis, ovoideis, utrinque obtusis, primum pallide fuscis, guttulatibus, strato hyalino obvolutis, dein intense atro-fuscis, opacis, 13-15 \approx 7-8,5.

Hab. in ramis Ephedræ distachyæ in arenosis pr. ostium ligericum (Loire) Galliæ.

14. **Anthostomella minor** Ell. et Ev. — Syll. IX, pag. 510 — var. 3630

micrasca Starb., Ascom. Schw. Chaco-Cordill. Exp., Arkiv f. Bot. Bd. V (1905) p. 25. — Ascis (cum sporidiis monostichis) 50-54 \approx 3,5-4; (cum sporidiis partim distichis) 43 \approx 5,5; sporidiis 7,5-10 \approx 3-4.

Hab. in ramulis aridis in prov. Jujuy Argentinæ. — Secundum descriptionem in Syll. IX, p. 510, specimina hæc a typo differunt forma ascorum et sporidiorum, sporidiis vix inæquilateralibus, sæpe 4-5, distichis vel oblique transversim monostichis, utrinque acutiusculis, peritheciis sparsim gregariis, epidermidem nigricantem ostiolo cylindrico-conico perforantibus.

15. **Anthostomella Molleriana** Trav. et Spessa, Bol. Soc. Brot. XXV 3631

(1910) p. 169, t. I, f. 1. — Peritheciis adproximato-seriatis vel gregariis, cortice nigrificata tectis eamque pustulatim sublevantibus, interdum ostiolo vix erumpentibus, lenticularibus vel basi applanatis, atris; excipulo lateraliter stromatice effuso, 400-500 \approx 100-150, contextu indistincte pseudoparenchymatico, fuligineo-

atro; ascis clavato-ventricosis, apice rotundatis, spurie paraphysatis, octosporis, $40-50 \times 14-18$; sporidiis subdisticho-congestis, ovoideo-fusoideis, utrinque attenuato-rotundatis, initio hyalinis dein fuligineis, $12-14 \times 5-7$.

Hab. in petiolis siccis Phœnicis dactyliferæ in Horto botanico conimbricensi (A. MOLLER). — Ob perithecia circumcirca stromatice dilatata, species ad *Auerswaldiam* nutat. Cfr. Traverso, *Fl. it. crypt.* Pyren. p. 484-486.

16. *Anthostomella constipata* (Mont.) Sacc. — Syll. XI, p. 282. — 3632
var. *diminuta* Rehm, in Tranzsch. et Serebrianikow, Mycotheca rossica, fasc. II, n. 73, (1910). — Sporidiis $10-12 \mu$, strato mucoso 1μ . cr. obductis; porus jodo cærulescens.

Hab. in sarmentis Smilacis (?) in Russia.

17. *Anthostomella Bromeliaceæ* Rehm, Ann. Mycol. V (1907) p. 525. 3633
— Peritheciis in peridermio haud denigrato, sed maculatim dealbato innatis, dispersis, clypeo orbiculari nigro obtectis, 1 mm. latis, globulosis, atris, modo poro perspicuo prominentibus; ascis cylindraceis 130×6 , octosporis; sporidiis fusiformibus, rectis, 1-cellularibus, guttulis 1-3 oleosis repletis, fuscis, $14 \times 3-3,5$ monostichis; paraphysibus filiformibus, septatis, 3μ . cr.

Hab. ad folium Bromeliaceæ, Sao Leopoldo, Rio Grande do Sul, Brasilia (Rick S. J.). — Affinis *Anthostomellæ eliminatæ* (B. et C.) Sacc.

18. *Anthostomella puyæcola* Speg., Fungi Chilenses (1910) p. 38. — 3634
Maculis amphigenis pallescentibus indeterminatis; peritheciis minutis immersis, sæpius epiphyllis, areola pusilla nigra cuticulari circa ostiolum donatis, 100μ . diam.; ascis cylindraceis breviter pedicellatis, crasse paraphysatis $80-90 \times 5-6$; sporidiis ellipsoideo-subnavicularibus, nudis, $8-10 \times 5-6$.

Hab. in foliis emortuis putrescentibus Puyæ cæruleæ, Cerro S. Cristobal de Santjago, Chile, Amer. austr.

19. *Anthostomella vestita* Speg., Fungi Chilenses (1910) pag. 39. — 3635
Maculis amphigenis pallescentibus indeterminatis; peritheciis minutis, areola stromatica nigra eximie coronatis, $150-180 \mu$. diam.; ascis linearibus octosporis, breviter pedicellatis, parce paraphysatis $110-120 \times 12-16$; sporidiis oblique v. transverse monostichis, ellipsoideis, non v. vix inæquilateralibus, fuligineis, subparvis, grosse-uninucleatis, $14-15 \times 9-10$, tunica hyalina mucosa sat crassa vestitis.

Hab. in foliis emortuis Puyæ chilensis, Cerro Alegre de Valparaiso, Chile Amer. austr.

20. *Anthostomella* ? *lonchosperma* Speg., An. Mus. Nac. Buenos Aires 3636 t. XIX (1909) pag. 340. — Maculis amphigenis sparsis repando-orbicularibus, 5-15 mm. diam., non impressis, obsolete determinatis, atris, per ætatem plus minusve pallescentibus; peritheciis epidermide tectis vix ostiolo minute papillato perforante manifestis, membranaceo-coriacellis, pusillis; ascis clavulatis aparaphysatis octosporis $110-120 \times 20$; sporidiis oblique monostichis, lanceolatis v. clavulatis, primo hyalinis serius fuligineis, $32-46 \times 10$, primum tunica mucosa hyalina vestitis et tunc $50-60 \times 16-18$.

Hab. ad folia viva *Scirpi asperi* in uliginosis insulæ Santjago prope La Plata, Amer. austr.

21. *Anthostomella punctata* (Rob. et Desm.) Sacc. — Syll. I, p. 278. 3637 — var. *Nardi* Rehm, Ann. Mycol. VII (1909) p. 408. — Ascis cylindraceis, apice truncatis et incrassatis, 90×8 , octosporis; sporidiis obtuse ellipsoideis, plerumque subcurvatis, 1-cellularibus, grosse 2-guttatis, subfuscis, monostichis, $9 \times 5-6$.

Hab. in foliis siccis *Nardi strictæ* in M. Arber in silva Bavarica (REHM).

22. *Anthostomella Danthoniæ* Mac Alp., Austral. Fungi Dec. I-II, 3638 p. 373 (Proceed. Linn. Soc. New S. Wal. 1902). — Minuta, nigra, gregaria, pustulata; peritheciis amphigenis, sed sæpius hypophyllis, tectis, dense confertis, seriatis, ostiolo albo-circumzonato erumpentibus, sæpe compressis; ascis cylindraceis vel undulatis, apice leviter tenuato-rotundatis, breviter stipitatis; octosporis, $140-150 \times 19-20$, interdum ob sporidia disticha usque ad 28μ . cr.; sporidiis mono-distichis, brunneis, crasse tunicatis, ellipsoideis, $20-26 \times 15-17$; paraphysibus tenuibus, $0,5-1 \mu$. cr., ascos superantibus, hyalinis v. coacervatis rubentibus, granulosis.

Hab. in foliis vaginisque *Danthoniæ penicillatæ*, Armona Vict. Australiæ (ROBINSON).

23. *Anthostomella rubicola* (Speg.) Sacc. et Trott., *Entosordaria rubicola* Speg., Fungi Chilenses (1910) p. 40, cum icon. — Peritheciis gregariis clypeo nigro communi tectis parvis, carbonaceis, 250μ . diam.; ascis cylindraceis breviter pedicellatis octosporis paraphysatis $150 \times 8-10$; sporidiis cylindraceo-ellipsoideis, fuligineis grosse uninucleatis, 12×6 , utrinque hyalino-caudatis, cauda supera majori, infima minima.

Hab. in ramos emortuos *Rubi sancti* prope Ciudad de Valdivia, Chile Amer. austr. — Ab *Ent. appendiculosa* (B. et B.) Sacc. differt ascis paraphysatis, sporidiis minoribus bicaudatis.

24. *Anthostomella perseicola* (Speg.) Sacc. et Trott., *Entosordaria* 3640
perseicola Speg., Fungi Chilenses (1910) p. 40, cum icon. — Peritheciis immersis laxè pauci-gregariis ad hypophyllum areola minuta nigra coronatis, 120-130 μ . diam.; ascis linearibus aparaphysatis, 120 \times 5-6, octosporis; sporidiis rectis, monostichis, fuligineis cylindraceo-ellipsoideis utrinque obtusissimis atque cauda unguiformi hyalina appendiculatis, 10-12 \times 6.

Hab. in foliis emortuis putrescentibus Perseæ Lingue, Cerro Caracol de Concepcion, Chile Amer. austr.

25. *Anthostomella valparadisiaca* (Speg.) Sacc. et Trott., *Entosordaria* 3641
valparadisiaca Speg., Fungi Chilenses (1910), pag. 41. — Amphigena; maculis ad epiphyllum subflavescentibus indeterminatis ad hypophyllum albescentibus indeterminatis v. sæpe linea sinuosa stromatica nigra limitatis; peritheciis laxè gregariis omnino infossis, majusculis, clypeo nigro circa ostiolum donatis, 250-300 μ . diam.; ascis linearibus aparaphysatis breviter pedicellatis, 180-200 \times 10; sporidiis monostichis navicularibus utrinque globulo hyalino minuto appendiculatis, mediocribus, fuligineis, 24-26 \times 7-8.

Hab. in foliis emortuis putrescentibus Puyæ chilensis, Cerro Alegre de Valparaiso, Chile Amer. austr.

26. *Anthostomella micraspis* (Berk.) Sacc. et Trav. — Syll. XIX, 3642
p. 77, *Sphæria micraspis* Berk., in Journ. of Bot. (1842) p. 156, t. VII, f. 9; Curr. Trans. Linn. Soc. XX (1859) p. 321, t. 58, f. 59. — Peritheciis sparsis, globoso-depressis, ostiolo papilliformi, crustæ applanato-hemisphæricæ innato-superficiali peritheciiformi immersis, parte prominente conico-hemisphærica pertusa; ascis.... sporidiis fusoides, rectis, utrinque obtusulis, maximis, 90 \times 20 (ex icone Curr.) brunneis, strato angusto hyalino tectis.

Hab. in lignis ad crustam rubram lichenosam in insulis Philippinensibus (H. CUMING). — Ex Currey l. c. forte *Verrucariae* species.

PARANTHOSTOMELLA Speg., Fungi Chilenses (1910) p. 42 (Etym. *para* prope et *Anthostomella*). — Est *Anthostomella* clypeo nigro circa ostiolum destituta.

1. *Paranthostomella eryngiicola* Speg., l. c. p. 42 cum icon. — Ma- 3643
culis amphigenis pallescentibus indeterminatis; peritheciis parenchymate immersis, ostiolo nigro punctiformi coronatis, 200-250 μ . diam.; ascis subclavulatis, aparaphysatis, 120 \times 20-22, octosporis;

sporidiis distichis, elliptico-fusoideis, utrinque acutissimis, exappendiculatis, obscure fuliginis, 32-34 \times 10-11.

Hab. in foliis emortuis *Eryngii paniculati*, Cerro Caracol de Concepcion Chile Amer. austr.

2. *Paranthostomella valdiviana* Speg., Fungi Chilenses (1910) p. 44, 3644 cum icon. — Maculis nullis; peritheciis innato-erumpentibus subglobosis, atris, subcarbonaceis 100-120 μ . diam.; ascis linearibus aparaphysatis, breviter pedicellatis, octosporis, 70-75 \times 7-8; sporidiis ellipsoideo-subnavicularibus, basi globulo hyalino auctis, fuliginis, nudis, 10-11 \times 5, plerumque biguttulatis.

Hab. in foliis dejectis putrescentibus *Perseæ* Lingue prope Ciudad de Valdivia, Chile Amer. austr.

3. *Paranthostomella uncinicola* Speg., Fungi Chilenses (1910) p. 43, 3645 cum icon. — Paraentosordaria; maculis nullis; peritheciis globosis immersis 90-110 μ . diam.; ascis linearibus breviter pedicellatis paraphysatis, octosporis, 70-75 \times 5-6; sporidiis monostichis, navicularibus, fuliginis, parvis, apice infero globulo hyalino auctis, 10-12 \times 4-4,5, tunica mucosa tenui vestitis.

Hab. in foliis emortuis *Unciniæ erinaceæ* prope Ciudad de Valdivia, Chile Amer. austr.

BOMBARDIA Fr. — Syll. I p. 277, XVI p. 435.

1. *Bombardia comata* Kirschst., Verh. Bot. Ver. Brandenb. XLVIII 3646 (1906) p. 50. — Peritheciis sparsis, nigris, hemisphaericis, basi lata sessilibus, membranaceis, papilla brevi nitidula præditis, qua excepta, brunneo-tomentosis, 300-400 μ . diam., pilis tenuibus, flexuosis, ramosis 2 μ . cr.; ascis tereti-clavatis, sursum obtuse rotundatis, longiuscule stipitatis, 120-150 \times 16-18, octosporis; sporidiis oblique monostichis v. disticho-conglobatis, primo cylindræis, utrinque rotundatis, copiose guttulatis, 25-35 \times 5-6, dein ovoideis, atrobrunneis, vertice obtuse conoideis, basi applanatis, ibique appendice hyalina, recta, sporidii diam. æquante auctis, 16-18 \times 10-11; paraphysibus copiosis, filiformibus, ramosis.

Hab. in ligno populino decorticato, udo, in Havel prope Rathenow Borussiae.

ROSELLINIA De Not. — Syll. I p. 252, IX p. 495, XI p. 280, XIV p. 494, XVI p. 435, XVII p. 595.

1. *Rosellinia Pepo* Patouill., Bull. Soc. Mycol. Fr. XXIV (1908) 3647 p. 9, cum icon. — Peritheciis sparsis v. gregariis, subiculo cru-

staceo conidifero insidentibus, globosis, substipitatis, 2,5-3 mm. diam., atro-brunneis, carbonaceis, ostiolo conico atro-nitenti semper clauso areola planiuscula obscuriori cincto donatis; ascis elongatis apice capitatis, obturaculo ovoideo, jodi ope cærulescenti præditis, inferne longe attenuatis, 8-sporis, 10-12 μ . latis; paraphysibus numerosis, linearibus; sporidiis brunneis, rectis, fusiformibus, utrinque acutis, magnis, 62-67 \times 8-9, halone hyalino utraque fine auctis dein nudatis.

Hab. in cortice *Hymenææ* Courbaril, Guadalupe (Duss).

— Adsunt setulæ conidiferae erectæ (*Graphium*) 1-3 mm. altæ, 30-60 μ . latæ, ex hyphis brunneis septatis, 4-6 μ . cr. compositæ, subiculo crustaceo sitæ; conidiis non visis.

2. **Rosellinia opunticola** Speg., An. Mus. Nac. Buenos Aires t. XIX 3648 (1909) p. 338. — Peritheciis subconoides, densiuscule constipatis primo ostiolo crasse umbonato tantum exsertis, crusta pulverulenta alba vestitis dein denudatis, atris, glabris submembranaceis, contextu pellucido sed indistincto, atro-fuligineo; ascis apice truncatis deorsum breviter cuneato-pedicellatis, 150-160 \times 25-30, paraphysibus filiformibus commixtis; sporidiis octonis rectis v. oblique distichis navicularibus utrinque subacutiusculis medio turgidulis, 30-40 \times 14-16, non v. 2-guttulatis, atro-fuligineis.

Hab. ad lignum denudatum *Opuntia Fici-indica* prope Villa Maria Rep. Argentina, Amer. austr.

3. **Rosellinia andina** Speg., An. Mus. Nac. Buenos Aires t. XIX 3649 (1909) p. 337. — Matrice cortice orbata late diffuseque infuscata; peritheciis semiexsertis basi ligno insculptis, parvis 150-160 μ . diam., semper glabris, minute papillato-ostiolutis; ascis constipatis antice subtruncatis postice brevissime cuneato-pedicellatis, paraphysibus longioribus filiformibus obvallatis, 100 \times 10-12, octosporis; sporidiis rectis v. oblique monostichis, e fronte ellipsoideis e latere lenticulari-compressis, levibus, 14-15 \times 9-10, eguttulatis.

Hab. ad ramos emortuos *Patagonii pinifolii* in rupestribus prope Puente del Inca, Rep. Argentina Amer. austr.

4. **Rosellinia emergens** (B. et Br.) Sacc. — Syll. I, p. 257. — var. 3650 **bambusicola** Theiss., Ann. Mycol. VI (1908) p. 351. — Peritheciis arcte aggregatis (typice) vel subsparsis, depresso globosis 600-800 μ . diam. atris subnitentibus, ostiolo acuto nitido brevi, demum minutissime pertuso, serius e mycelio velutino emergentibus; subiculo brunneo-atro, tenui sed densissimo, continuo, velutino; ascis evanidis; sporidiis griseo-fuligineis, intus granulatis, rectis, raro pla-

noconvexis, utrinque subacutis, fusoideis, 55-80 \times 15-22 (interdum 90 μ . æquantibus).

Hab. ad culmos subputridos Guaduae, Sao Leopoldo, Brasiliæ. — Perithecia circa papillam sæpe areola (interdum duplici) applanata insignita. Cum *Ros. decipienti* Penz. et Sacc. non comparanda. An huc *Ros. sepulta* (B. et C.) Sacc.?

5. *Rosellinia valdiviensis* Speg., Fungi Chilenses (1910) p. 46, cum 3651 icon. — Peritheciis solitariis v. pauci-gregariis primo tectis dein erumpenti-superficialibus subglobosis mediocribus, 500-800 μ . diam., papillato-ostiolatis carbonaceis, glabris levibus; ascis cylindraceis breviter pedicellatis, subparaphysatis, 110 \times 15, octosporis; sporidiis elliptico-elongatis, biguttulatis fuligineis, levibus 18-20 \times 9-10.

Hab. in ramis emortuis putrescentibus Perseæ Linguae prope Ciudad de Valdivia, Chile Amer. austr. — *Ros. mammoideæ* (Cke.) Sacc. affinis.

6. *Rosellinia procera* Syd., Ann. Mycol. VIII (1910) p. 37. — Pe- 3652 ritheciis sparsis vel aggregatis, glabris, globosis, firmis, 1 mm. diam., distincte papillatis, atris, e subiculo denso tomentoso fusco late effuso adnato persistenti emergentibus; ascis late cylindraceis, apice rotundatis, 4-(?)sporis, 120-160 \times 25-35; sporidiis fusiformibus, utrinque sæpius attenuatis, continuis, fuscis, 70-140 \times 12-23, exappendiculatis, tunica mucosa hyalina tenuissima vestitis.

Hab. ad corticem, Davao, Mindanao (E. B. COPELAND). — A *R. aquila*, cui habitu accedit, mox distinguitur sporidiis multo majoribus.

7. *Rosellinia australis* Speg., An. Mus. Nac. Buenos Aires t. XIX 3653 (1909) p. 337. — Peritheciis primo subiculo violaceo-gossypino omnino tectis, serius denudatis, hinc inde dense constipatis globulosis 1,25-1,75 mm. diam., fusco-atris opacis levibus, superne non v. obsoletissime applanato-areolatis, centro minute eximieque papillato-ostiolatis, duris, carbonaceis; ascis quandoque cylindraceis quandoque subfusoideis 140-150 \times 10-12, antice rotundato-subtruncatis deorsum breviuscule cuneato-pedicellatis, octosporis, paraphysibus filiformibus guttulatis longioribus obvallatis; sporidiis oblique mono- v. distichis, navicularibus, 20-22 \times 8, primo tunica tenui hyalina obvolutis atque caudicula subglobosa etiam hyalina auctis, serius nudis, opacis, fuligineis.

Hab. ad ligna putrida in hortis La Plata, Rep. Argentina Amer. austr. — Species statum ascophorum *Rostafinskiae australis* Sp. sistit.

8. *Rosellinia Desmazierii* (B. et Br.) Sacc. — Syll. I, pag. 254. — 3654
var. *acutispora* Theiss., Ann. Mycol. VI (1908) p. 350. — Ascis breviter pedicellatis, supra obtuse rotundatis, p. sp. 200-260 \approx 8-10; sporidiis octonis, atris, lanceolatis, rectis curvulisve, acutissimis, appendice destitutis 42-50 \approx 6-7; paraphysibus copiosis filiformibus; peritheciis brunneis, papillâ minuta atra instructis.

Hab. ad ligna emortua, Sao Leopoldo Brasiliæ. — Subiculum speciem *Graphio Desmazierii* Sacc. peraffinem sistit. A typo differt sporidiis majoribus utrinque acutissimis. Differt quoque a *Rosell. bunodi* (B. et Br.) Sacc. peritheciis non verrucosis.

9. *Rosellinia Bresadolæ* Theiss., Ann. Mycol. VI (1908) p. 351. — 3655
Peritheciis aggregatis, conico-obovatis, 1 mm. altis, verrucososcruposis, atris, sub lente griseo-leprosis, papillatis, circa papillam pro more applanatis vel etiam, papillâ usque ad 600 μ . protractâ, rostratis; subiculo obsoleto vel, peritheciis magis sparsis, subnullo, brunneo-atro; ascis cylindricis, octosporis p. sp. 200-220 \approx 15; sporidiis atris, rectis v. plano-convexis v. curvatis, utrinque attenuatis, 30-40 \approx 10-13.

Hab. ad ligna emortua, Sao Leopoldo Brasiliæ. — Perithecia interdum, sed raro, breviter stipitata. A cl. Bresadola ut n. sp. declarata. Cf. Rick « Pilze aus Rio Grande do Sul » (Broteria 1906, pag. 50, cum icone T. I, f. 4) sub *Xylaria microcephala* Mont. — Var. *minor* Theiss., l. c. — Differt peritheciis paullo minoribus, confertioribus sporidiisque minoribus; ascis 160-180 \approx 9-11 p. sp., pedicello usque ad 120 μ . longo; sporidiis oblongo-fusoideis, brunneo-atris, utrinque attenuatis, gutta una magna vel pluriguttatis, 27-36 \approx 8-10. Cum typo.

10. *Rosellinia tricolor* Theiss., Ann. Mycol. VI (1908) pag. 351. — 3656
Subiculo obsoleto; peritheciis confertis brunneis, 500-700 μ . diam., globosis, supra plerumque applanatis, papilla atra, ostiolo pertuso griseo-annulato; ascis p. sp. 200-230 \approx 13-15; sporidiis oblongis, rarius late ellipticis, atris, rectis vel plano-convexis vel curvulis, typice grosse 1-guttatis, 32-45 \approx 12-15.

Hab. in ligno putrido, Sao Leopoldo Brasiliæ.

11. *Rosellinia aquila* (Fr.) De Not. — Syll. I, p. 252. — var. *pal-* 3657
micola Theiss., Beih. Bot. Centralbl. Bd. XXVII (1910) Abt. II, p. 392. — Peritheciis subiculo lilacino-griseo furfuraceo insidentibus, dense gregariis, ad tertiam v. mediam partem liberis, ætate glabris, liberis (ob reductionem et evanescentiam subiculi) discretis, atris, asperulis, opacis, globosis, c. 1 mm. diam., papilla crassa

conica, subacuta, pulverulenta, aterrima; sporidiis atris, oblongis v. ellipsoideis, utrinque rotundatis, rarius acutiusculis, $25-32 \times 8-10$, grosse 1-guttulatis.

Hab. in ligno Palmarum, Sao Leopoldo Rio Grando do Sul Brasiliæ. — A typo differt colore et evanescentia subiculi.

12. *Rosellinia hyalospora* Theiss., Ann. Mycol. VI (1908) p. 351. — 3658

Peritheciis membranaceo-carbonaceis, fragilibus, arcte gregariis, globosis, 300-500 μ . diam., læte brunneis, subnitentibus, papilla atra pro ratione crassa instructis, basi immersis, ætate fusco-griseis; subiculo atro-pulverulento, tenuissimo, facile evanido vel omnino nullo; ascis cylindricis, octosporis, obtuse rotundatis, p. sp. $130-160 \times 9-10$; sporidiis oblongo-fusoideis utrinque acutatis vel angustato-rotundatis, irregulariter rotundatis, hyalinis, $22-27 \times 7-8$.

Hab. ad ligna corticata, Sao Leopoldo Brasilia. — Ubi sporidia jugiter hyalina manent, species a typo generis separanda est. An potius *Wallrothiellæ* spec.?

13. *Rosellinia smilacina* Speg., An. Mus. Nac. Buenos Aires t. XIX 3659

(1909) pag. 339. — Matrice immutata v. plus minusve infuscata; peritheciis hemisphæricis innato-superficialibus laxè gregariis serius glabris, vix papillato ostiolatis, carbonaceis, 400-600 μ . diam.; ascis cylindræis dense constipatis, antice obtuse rotundatis, postice brevissime pedicellatis, aparaphysatis, octosporis, $100-125 \times 8-15$; sporidiis eximie ellipsoideo-navicularibus, $16-20 \times 8-10$, primo tunica hyalina tenui vestitis dein denudatis, fuligineis.

Hab. ad sarmenta Smilacis campestris, Parque Roca pr. Tucuman, Rep. Argentina Amer. austr.

14. *Rosellinia abscondita* Rehm, Hedw. XXVIII (1889) p. 356, non 3660

Tassi (1900) — Syll. XVI, p. 436 — quæ nunc *R. senensis* Trav. Fl. it. crypt. Pyr. pag. 459. — Peritheciis plerumque gregariis, sessilibus, subglobosis, basi lata insidentibus, apice conoideo-papillatis, fusco-nigris, scabris, duriusculis, parenchymaticis, 0,3-1 mm. diam.; ascis cylindræo-clavatis, apice incrassatis, 120×15 , octosporis; sporidiis fusoides v. subellipsoideis, rectis v. subcurvatis, 1-cellularibus, crasse 1-2-guttatis, $18-24 \times 4,5-5,5$, primitus hyalinis, dein fuscis, strato mucoso 3-4 μ . cr., obductis, 1-2-stichis; paraphysibus filiformibus, guttulatis, 3-4 μ . cr.

Hab. intra fasciculos foliorum graminis siccorum juxta glaciem æternam, Hochjoch vallis Oetz Tirolia.

15. *Rosellinia geophila* B. R. S. in Saccardo, Not. Myc. VI, Ann. 3660*

Myc. v. III (1905) pag. 508. — Peritheciis sparsis v. interdum dense gregariis, conoideis, 300-350 μ . diam., carbonaceis, nigris, setulis rigidis, continuis, levibus, apice acutulis, fuliginéis, 45-60 \times 4-4,5 undique ornatis, in mycelio e pilis flexuosis, septatis olivaceis formato semi-immersis; contextu carbonaceo; ascis cylindraceis, tenui-tunicatis, octosporis, 156-200 \times 15-17, paraphysibus granulosis confusis obvallatis; sporidiis monostichis, ellipsoideis, 24-30 \times 12-14, opace fuliginéis.

Hab. ad terram arenosam inter muscos, La Panne pr. Furnes Belgii (M. ROUSSEAU). — Species prædistincta, forte e radiculis Barbulæ sp. oriens. Ad subgen. *Coniochaetem* spectat.

16. *Rosellinia subverruculosa* Rehm, Ann. Mycol. V (1907) p. 526. 3661

— Peritheciis peridermio fuscido late expanso gregarie insidentibus, dein erumpentibus, lata basi sessilibus, subconicis, minutissime papillulatis, nigris, glabris, demum distincte verrucosis, carbonaceis, ca. 0,8 mm. diam.; ascis evanidis; sporidiis subnavicularibus, utrinque obtusis, 1-cellularibus, fuscis, 21-24 \times 10-11.

Hab. ad calamum Bambusæ, Sao Leopoldo, Rio grande do Sul, Brasilia (RICK S. J.) — *Ros. sublimbatæ* proxima. Ad subg. *Tassiellam* pertinet.

17. *Rosellinia nectrioides* Rehm, Ann. Mycol. VI (1908) p. 324. — 3662

Peritheciis in mycelio pulvinato, crasso, roseolo, ca. 1-1,5 mm. lato et alto, per epidermidem laciniatim disruptam emergente usque ad 20 arcte congregatis, sessilibus, conoideis, fusco-nigris, glabris, in ostiolum conoideum breve, nigrum elongatis, ca. 0,5 mm. diam., carbonaceis; ascis cylindraceis, perlongis, p. sporif. 120 \times 10, octosporis; sporidiis fusiformibus, utrinque subacutatis, rectis, interdum paullulum inæquilateralibus, unicellularibus, subfuscis, 18-20 \times 5, monostichis; paraphysibus filiformibus.

Hab. ad ramulum Cratægi sanguineæ, ad Instit. botan. silviculturæ Petropolitanum (Dr. TRANZSCHEL). — *R. andurnensis* affinis.

18. *Rosellinia catacrypta* Rehm, Ann. Mycol. V (1907) p. 537. — 3663

Peritheciis globosis, minutissimis, poro vix perspicuo pertusis pro maxima parte cortice semiimmersis, demum foveolam denigratam relinquentibus, gregariis, 150 μ . diam., contextu parenchymatico fusco-viridi; ascis cylindraceis, octosporis, 120 \times 8; sporidiis elliptico-oblongis, obtusis, interdum subcurvatis, dilute fuscidulis, 1-cellularibus, nucleo centrali magno præditis, 15-20 \times 6-7, monostichis; paraphysibus ramosis, ascos superantibus.

Hab. in cortice Piri Mali et Cerasorum prope Sugenheim Franconiaë mediæ (Dr. REHM). — Imprimis peritheciis minutissimis, fere abditiis mox dignoscenda species. E subgen. *Amphisphaerellæ*.

19. *Rosellinia sancta-cruciana* Ferd. et Winge, Botanisk Tidsskr. 3664 XXIX (1908) p. 16, tab. II, fig. 4. — Peritheciis subiculo nullo, sulcis internerviis petioli insidentibus, superficialibus, subglobosis, papillula semigloboso-conoidea, brevi, nitenti (nonnumquam disculo insidente) præditis, $\frac{1}{2}$ - $\frac{3}{4}$ mm. diam., ferrugineo-pruinosis, atro-fuscis; ascis anguste clavatis, superne rotundatis, in pedicellum longum leniter attenuatis, ostiolo jodi ope intense cærulescente, 150-200 (parte sp. 80-110) \times 10-13; sporidiis irregulariter monostichis subdistichisve, octonis, oblongo-ellipsoideis, subnavicularibus, obtusulis v. breviter acutatis, tunica mucosa anguste adjacente, utrinque appendiculam saccato-subglobosam, hyalinam 3-5 μ . cr. formante indutis, 16-20 \times 6-7,5, 2-4-guttulatis, atro-castaneis; paraphysibus filiformibus, septatis, 3 μ . cr., ascos superantibus, evanescentibus.

Hab. ad petiolum siccum Cocoës nuciferæ in insula St. Croix Indiaë occ. (RAUNKIAER).

20. *Rosellinia cinereo-violascens* Starb., Ascom. Schwed. Chaco-Cordill Exp, Arkiv f. Bot. V (1905) p. 17. — Peritheciis inter fasciculos rigidos, rugosissimos, erectos, ex hyphis densissime conglutinatis, fuscis, inæqualibus, septatis, 3,5-6 μ . crassis compositos orientibus, confertissime aggregatis, confluentibus et crustam longe lateque effusam facile formantibus, superficialibus, sphæroideis, vertice subapplanatis, vix papillulatis, poro minutissimo, areola nigra cincto perforatis, pulvere cinereo violascente ceterum obtectis, demum, jam evacuatis, crusta fere stromatica insidentibus, totis nigris, $\frac{1}{2}$ -1 mm. diam.; contextu densissimo, molliusculo, fere coriaceo-carbonaceo; ascis octosporis, cylindraceis vel anguste cylindraceo-clavatis, sursum rotundatis, deorsum longe pedicellatis, 85-100 \times 7,6 (p. sp.), cum pedicello circa 165 μ . longis; sporidiis monostichis, ellipsoideis, inæquilateralibus, utrinque acutiusculis, sæpe guttulatis; paraphysibus numerosis, filiformibus, hyalinis.

Hab. in truncis mucidis humi jacentibus prope Laguna de la Brea prov. Jujuy Argentinaë et in Bolivia.

21. *Rosellinia breensis* Starb., Ascom. Schwed. Chaco-Cordill. Exp, Arkiv f. Bot. Bd. V (1905) p. 17. — Peritheciis superficialibus, basi paullum infossis, longe lateque gregariis, sæpe confertissimis,

crustam formantibus, hemisphæricis, vertice semper applanatis, minute sed manifestum papillatis, carbonaceis, atratis, $\frac{1}{2}$ -1 mm. diam.; ascis octosporis, cylindraceis, sursum obtusis, longissime pedicellatis, jodo in areola minuta ad apicem cærulescentibus, 50-65 \approx 6-7,5 (p. sp.); sporidiis dense vel imbricatim vel oblique monostichis, irregulariter ellipsoideis, inæquilateralibus, uni- vel sæpissime bi-guttulatis, fuscis, 9-11 \approx 5-5,5; paraphysibus longissimis, latiusculis, mucilaginosis, multiguttulatis, c. 2,5 μ . crassis.

Hab. ad truncos aridos pr. Laguna de la Brea, prov. Jujuy Argentina. — *R. Linderæ* Peck peraffinis videtur, forma autem sporidiorum differt; *R. impositæ* Schw. quoad habitum affinis, sed sporidiis multo majoribus diversa.

22. *Rosellinia elæospora* Sacc. et Fairm., in Saccardo, Microm. A. 3667 mer. novi, Journ. of Myc. XII (1906) p. 48. — Peritheciis late et dense gregariis, superficialibus, globosis, glabris, circ. $\frac{1}{2}$ mm. diam., papillatis, senio papilla amissa perforatis, carbonaceis, nigris; ascis tereti-elongatis, deorsum tenuato-stipitatis, 60 \approx 7-8, octosporis, filiformi-paraphysatis; sporidiis oblique monostichis, elliptico-navicularibus, inæquilateralis, utrinque obtusatis, 13-15 \approx 4,5-5, rarius usque ad 16 \approx 5,6, fumoso-olivaceis, 2-3-guttulatis v. granulosis.

Hab. ad truncos putrescentes dejectos in silvis pr. Lydonville, N. Y. Amer. bor. — Præsertim sporidiis fumoso-olivaceis dignoscitur.

23. *Rosellinia metachroa* Ferd. et Winge, Botanisk Tidsskr. XXIX 3668 (1908) p. 16, tab. II, fig. 3. — Subiculo nullo; peritheciis matrice inquinata insidentibus, superficialibus, dense gregariis sæpeque in plagulas subeffusas confluentibus, globosis, usque ad $\frac{3}{4}$ mm. diam., pruina primo rubro-fusca, deinde cinereo-glaucæ, persistenti obtectis, superne nudis, atro-fuscis, subpapillatis, poro vix visibili perforatis; ascis lineariter cylindraceis, poro jodi ope cærulescente, in pedicellum longum leniter attenuatis, 135-170 (parte sp. 75-100) \approx 6,5-8; sporidiis octonis, monostichis, oblongo-ellipsoideis, e latere visis utrinque acutiuscule rotundatis, subnavicularibus, 13-16 \approx 5,5-6,7, 2-pluriguttulatis, atro-fuscis; paraphysibus filiformibus, longis 2-4 μ . cr., apice jodo cærulescentibus.

Hab. ad lignum corticatum v. nudum in insulis St. Croix et St. Jan Indiæ occ. (RAUNKIAER). — Species *Ros. cinereo-violascenti* Starb. proxima sed absentia subiculi, characteribus pruinae, habitu non stromatico sat diversa.

24. *Rosellinia pulchella* Syd., in De Wildem., Flore Bas-Moy. Congo 3669
t. III, fasc. I (1909) p. 17. — Peritheciis in ligno late nigrificato
superficialibus crustaceo-aggregatis, dense et æque congestis, sub-
confluentibusque, globosis, levibus, griseo-lilacinis, ostiolo distincto
papilliformi nigro, c. 350-400 μ . diam., carbonaceis; ascis cylin-
draceis, longe pedicellatis, p. sp. 55-80 \approx 6-7, octosporis; sporidiis
oblique monostichis, ellipsoideis, utrinque obtusis, fuscis, 1-cellu-
laribus, 8,5-12 \approx 4-5,5; paraphysibus filiformibus, numerosis.

Hab. in ligno decorticato, Kisantu, Congo, jan. 1907 (VANDE-
RYST). — Subgeneri *Coniomela* pertinet.

25. *Rosellinia similis* Sacc., Ann. Mycol. VI (1908) p. 564. — Peri- 3670
theciis laxè gregariis, globosis, superficialibus, minutis, nigris, le-
vibus, apice breviter obtuse papillatis, 160-200 μ . diam.; ascis cy-
lindræis breviter stipitatis, apice obtusulis, filiformi-paraphysatis,
60-70 \approx 7, octosporis; sporidiis monostichis ellipsoideis, 14 \approx 7, fu-
ligineis, 1-guttatis.

Hab. in truncis corticatis dejectis in silvis Lyndonville N. Y.,
Amer. bor. socia *Nectria episphaeria* (FAIRMAN). — Ab affini *R.*
rimulicola distinguitur peritheciis omnino levibus, sporidiis paullo
longioribus, guttatis.

26. *Rosellinia rhachidis* Pat., Bull. Soc. Myc. de Fr. XXII (1906) 3671
p. 57. — Peritheciis sparsis, numerosis, in maculis dealbatis la-
tissimis laxè approximatis, basi insculptis, subglobosis, 0,3-0,5 mm.
diam., atris, carbonaceis, ostiolo conico-papillato; ascis 8-sporis,
cylindræis; sporidiis monostichis, ellipsoideis, atro-brunneis, sæpe
biguttulatis, 10 \approx 5.

Hab. in rhachide foliorum *Cocoës nuciferae*, Motu Papeatee
Polynesiae gallicae.

27. *Rosellinia Cocoës* P. Henn., Hedwigia XLVII (1908) p. 256. — 3672
Peritheciis gregariis superficialibus hemisphaericis v. subglobosis,
atro-carbonaceis, pruinosis, subrugulosis, ad ostiolum papillatum
sublevibus, ca. 0,7-1 mm. diam.; ascis cylindræo-clavatis, obtu-
sis, 8-sporis, paraphysatis, 90-100 \approx 7-8; sporidiis oblique monosti-
chis, ellipsoideis, inaequilateralibus, obtusiusculis vel acutiusculis,
atris, 13-16 \approx 6-8.

Hab. in pedunculis emortuis *Cocoës nuciferae*, Mindanao,
Davao Ins. Philippin. (COPELAND).

28. *Rosellinia Bambusæ* P. Henn., Hedwigia XLVII (1908) p. 256. 3673
— Peritheciis culmicolis, gregariis, superficialibus, subhemisphaeri-
cis, atro-carbonaceis, rugulosis, papillato-ostiolatis, ca. 0,5-1 mm.

diam.; ascis cylindræis, 8-sporis, plerumque secedentibus; sporidiis oblique monostichis, oblongis, obtusis, atro-brunneis, $8-11 \approx 3-3.5$.

Hab. in ramis emortuis Bambusæ, Luzon, Prov. Pampanga Mt. Aruyat, Ins. Philippin. (MERRILL). — A *Ros. gasteroide* E. et E. diversa.

29. **Rosellinia Rickii** Bres. in Rick Fungi austro-amer. fasc. III-IV 3674 n. 53, Ann. Myc. v. IV (1906) p. 310. — A *Rosellinia griseo-cincta* Starb. videtur tantum differre peritheciis pellicula albida initio omnino tectis, non anulo mucedineo griseo-cinctis.

Hab. ad truncos in Brasilia.

30. **Rosellinia cuprea** Rick, Broteria V (1906) p. 46. — Peritheciis 3675 subiculo rufo-citrino tectis, dein liberis, cupreo-sanguineis, glabris, splendentibus, ostiolis nigris $1/2$ mm. diam., aggregatis in formam *Hypoxyli*, intus initio citrinis; ascis $80 \approx 10$; sporidiis atro-brunneis $10-15 \approx 7$, apice sæpe truncato; paraphysibus conglutinatiss.

Hab. in ramis corticatis Ingæ, Rio Grande do Sul Brasiliæ.

31. **Rosellinia Victoriæ** Syd., Ann. Myc. VI (1908) p. 483. — Subi- 3676 culo albo late effuso, tandem sordide albo et plus vel minus evanescente; peritheciis plerumque dense gregariis confertisque, primo subiculo immersis, dein erumpentibus et subliberis, late globoso-conicis, levibus, atris, opacis, carbonaceis, papillatis, circa papillam sæpe albis, 300-600 μ . diam.; ascis anguste cylindræis, longe pedicellatis, $60-80 \approx 5-7$, octosporis; sporidiis monostichis, fusoides, inæquilateris, continuis, obscure brunneis, $9-11 \approx 5-6$.

Hab. ad truncos ecorticatos, County of Follett, Victoria, 1907 (F. M. READER).

32. **Rosellinia Bakeri** Ellis in Torrey V (1909) p. 87. — Peritheciis 3677 sparsis vel 3-6 aggregatis, vel 3-4 seriatim dispositis, sed haud confluentibus, globosis, leniter asperulis, ostiolo minute papilliformi atro excepto, basi ligno paullum immersis, $1/2$ mm. diam.; ascis cylindræis, breviter stipitatis, p. sp. 55-65 $\approx 7-8$; sporidiis monostichis, acute ellipticis, præcipue uno fine acutis, subinæquilateris et leniter compressis, $8-10 \approx 4-4 1/2$.

Hab. ad ramos emortuos Ureræ spec. Nicaragua (C. F. BAKER). — Differt ab *R. compressa* peritheciis majoribus sporidiisque minoribus.

33. **Rosellinia variospora** Starb., Ascom. Schwed. Chaco-Cordill. 3678 Exp., Arkiv f. Bot., Bd. V (1905) p. 18, fig. 12. — Peritheciis sparsis, interdum subconfertis, primo plane immersis, vertice prominulis, deinde liberatis, reliquiis matricalibus dispersis, sphæroi-

deis, minutissime papillulatis, mollissime verruculosus, contextu carnosus-coriaceo, nigro, 250-300 μ . diam.; ascis octosporis, cylindraceis, sursum rotundatis, brevissime pedicellatis, 50-63 \approx 6-7,5 (p. sporif.); sporidiis plerumque oblique et imbricatim monostichis, rarissime mediis distichis, forma quam maxime variis, breviter fusoides, utrinque fere acutiusculis vel ellipsoideis utrinque obtusis vel non raro orbicularibus, 10-13 \approx 5-6,5 vel 6-8 μ . diam.; paraphysibus copiosis, filiformibus, hyalinis.

Hab. in truncis aridis Salicis ad Rio Pilcomayo Boliviae. — Sporidiis forma quam maxime varia distincta videtur hæc species, quæ textura quoque valde a genere abhorret. Potius e subgen. *Amphisphærella*. An *Anthostomella*? — Var. *follicola* Theiss., Beih. Bot. Centralbl. Bd. XXVII (1910) Abt. II, p. 394. — A typo differt peritheciis majoribus nempe 0,6-0,8 mm. diam. et distincte papillatis. — In foliis Rubiaceæ arborescentis in Brasilia.

34. *Rosellinia callimorphoides* Rehm, Ann. Mycol. V (1907) p. 537. 3679

— Peritheciis 6-30 in soros subrotundos congregatis, primitus ligno semiimmersis, conoideis, rarius hemisphærico-globosis, demum sessilibus, atris, subnitidis, in papillulam brevem conspicue pertusam abeuntibus, 0,5 mm. diam., subcarbonaceis; contextu parenchymatico fusco; ascis cylindraceis, octosporis, 100 \approx 6-8; sporidiis oblongis, plerumque rectis, obtusis, 1-cellularibus, fuscis, 14-15 \approx 4,5, monostichis; paraphysibus filiformibus, hyalinis, longis, ca. 3 μ . crassis.

Hab. ad trabes Pini Cembræ infra Salden, Ortler, alpium Tiroliae, alt. ca. 2000 m. (Dr. REHM). — Ad subgen. *Amphisphærellam* pertinet et *R. callimorphæ* accedit.

35. *Rosellinia*? *glomerata* (Viala) Sacc. et Trav. — Syll. XX, p. 700 3680

— *Dematophora glomerata* Viala, Mal. de la Vigne, pag. 301-307, cum iconibus. — Mycelio brunneo irregulariter ramoso, flexuoso, filiformi, 2 μ . cr.; sclerotiis e mycelio oriundis, globulosis v. oblongis nigris, minutissimis, 25-35 μ . diam., duris; pycnidiiis ex evolutione sclerotii ortis, globosis, nigris, astomis copiosissimis, hyphulis flexuosis conspersis, tenuiter parenchymaticis, 90 μ . diam., sporulis innumeris, sessilibus, ellipsoideis, hyalinis, 3 μ . long.; conidiophoris (synnematibus ex eodem mycelio ortis (*Stysanus glomeratus* Sacc.) filiformibus, 3-8-fasciculatis, 1,5-2,3 mm. longis, nigris, rigidulis, rectis, ex hyphis angustissimis septatis, brunneis dense coalitis formatis, parte fertili fusoides-cylindrica indivisa rarius ramulosa, brunneola (typhiformi!), ramulis ultimis conidigeris ob-

clavatis; conidiis ovoideis crassiuscule tunicatis, $5,5 \times 4$, dilutissime fuscellis; peritheciis ignotis.

Hab. in radicibus basique trunci *Vitis viniferae*, præsertim Hérault, Landes, Vaucluse Galliae. — *Ros. necatrix* affinis sed panicula conidiophora non alba, conidiis majoribus etc. dignoscenda. Rarior, sed æque necatrix.

- 36 *Rosellinia* spec. Roll. in Bull. Soc. myc. Fr. (1905) p. 23, *Sphaeria* 3681 *Wolffensteniana* Kühn (certe inedita).

Hab. in radicibus *Citri Aurantii*, cui valde noxia, in insulis Balearibus et Valentia Hispaniae (OTTO WOLFFENSTENI, Inst. agronom. valentini director). — Fere absque dubio est *Rosellinia necatrix* v. ejus forma.

HELMINTHOSPHERIA Fuck — Syll. I p. 230.

1. *Helminthosphæria Odontia* v. Höhnelt, Fragm. z. Mykol. III, Sitzb. d. 3682 k. Ak. d. Wissensch. Wien, Bd. CXVI, Abt. I (1907) p. 108. — Peritheciis innatis dein erumpenti-superficialibus, dense gregariis, membranaceo-carbonaceis, nigris, globosis, distincte papillatis, $210-250 \mu$. diam., superne calvis, ceterum setis atris v. atro-violaceo-brunneis, crebriusculis, continuis, $50 \times 3-4$ vestitis; contextu indistincte celluloso; ascis parcissime paraphysatis, cylindraceutis, $70 \times 7-8$, octosporis; sporidiis monostichis, continuis, atro-cyaneis, diaphanis, 2-guttatis, oblongo-ellipsoideis, pro more rectis, non compressis, $6-9,5 \times 3,5-4$.

Hab. in hymenio *Odontia cristulata*, parasitice, ad truncum fagineum pr. Pressbaum, Wienerwald Austriae.

2. *Helminthosphæria Corticiorum* v. Höhnelt, Fragm. z. Myk. III, Sitzb. 3683 k. Ak. d. Wissensch. Wien. Bd. CXVI, Abt. I (1907) p. 109. — Peritheciis gregariis, nigris, membranaceo-carbonaceis, asperulis, initio innatis, dein semiemergentibus, globoso-ovoides, 500×300 basi hyphis parvis $4-5 \mu$. cr. brunneis præditis, sursum, præcipue circa ostiolum, setulis $60 \times 6-7$, obtusis, crasse tunicatis, griseo-brunneis, plus minus copiosis vestitis; ascis filiformi-paraphysatis, cylindraceutis, $110-120 \times 7$, octosporis; sporidiis ellipsoideo-fusoideis, utrinque obtusulis, continuis, 1- dein 2-4-guttatis, monostichis, fumoso-brunneolis, diaphanis, $13-16 \times 5-6$.

Hab. parasitice in hymenio *Peniophoræ cremæ* ad Danubium pr. Tulln Austriae. — Sporidia extra ascum rarius bicellularia fiunt.

CHÆTOMIUM Kunze — Syll. I p. 220, IX p. 484, XI p. 279, XIV p. 490, XVI p. 428, XVII p. 600. — Cl. G. BAINIER in Bull. Soc. myc. Fr. (1909) pp. 191-231, multas species novas *Chætomii* exhibet sine diagnosi systematica sed earum conspectum synopticum affert, quem studiosorum commodo hic referimus. Species nonnullæ jam editæ interjectæ sunt.

I. Setæ perithecii non ramosæ nec anastomoticæ.

A. Setæ rectæ v. undulatæ, non apice circinatæ.

† Setæ non furcatæ.

a. Setæ fere rectilineæ.

Ch. affine

b. Setæ distincte undulatæ.

Ch. Kunzeanum

†† Setæ furcatæ.

Ch. megalocarpum

B. Setæ sursum circinatæ.

Ch. murorum

C. Setæ spirales.

† Sporidia majuscula fusioidea.

a. Setæ omnes spirales.

Ch. spirilliferum

b. Setæ bifformes.

§ Ostioli setæ parvæ.

Ch. contortum

§§ Setæ copiosissimæ.

α Setæ in spiram longam æquiorassam convolutæ.

Ch. spirale

β Setæ in spiram sursum sensim tenuatam convolutæ.

Ch. undulatum

γ Setæ in spiram irregularem apice cuspidatam convolutæ.

Ch. setosum

†† Sporidia minora subsphæroidea.

a. Setæ echinulatæ v. longe cuspidatæ.

Ch. bostrychodes

b. Setæ leves non cuspidatæ.

Ch. comosum

D. Setæ crispatæ.

† Setæ in area nigra sup. perithecii tantum insertæ.

Ch. glabrum

†† Setæ ostioli crispæ et echinulatæ.

Ch. crispatum

††† Setæ ostioli crispæ, curvatæ et granulosa.

Ch. tortile

II. Setæ ramosæ, non anastomoticæ.

A. Rami rari, interdum difficile percipiendi.

† Setæ in spiram confertam convolutæ.

Ch. formosum

†† Setæ in spiram laxam æqualem convolutæ, perithecia ovoidea var. ovatum

††† Setæ in spiram laxam sursum tenuatam convolutæ.

var. neglectum

B. Rami copiosi, vere manifesti.

† Setæ rectæ plus v. minus regulariter dichotomæ.

a. Perithecia et sporidia minuta.	Ch. indicum
b. Perithecia et sporidia majuscula.	Ch. elatum
†† Setæ in dichotomias plerumque unilaterales.	Ch. chartarum
††† Setæ et ramuli spiraliter convoluti.	Ch. caprinum
†††† Setæ irregulariter ramosæ et torulosæ.	Ch. torulosum

III. Setæ ramosæ et anastomoticae.

A. Setæ polymorphæ, majores pleræque anastomoticae.	Ch. Cuniculorum
B. Setæ polymorphæ, crassiores longiores simplices, tenuiores ramosæ et anastomoticae.	C. rigidulum

1. *Chætomium megalocarpum* Bain. Bull. Soc. Mycol. Fr. XXV (1909) 3684 p. 202, t. 16, f. 1-4. — Perithecia varia, majora, 280×196 ; setulæ prælongæ $2,8 \mu$. cr., simplices v. furcatæ fuliginæ; asci clavati, breviter stipitati, octospori; sporidia majuscula, nunc irregulariter sphæroidea, $14-16 \mu$. diam., nunc ovoidea $14-16 \times 10$.

Hab. in charta emporetica putrescente in Gallia. — Var. *chlorinum* Bain., l. c. toto fungo viridi-chlorino. In petiolis et caule putri Eryngii in Gallia.

2. *Chætomium spirilliferum* Bain., Bull. Soc. Mycol. Fr. XXV (1909) 3685 p. 207, t. 17, f. 1-4. — Perithecia globulosa, 525μ . diam., e griseo nigricantia; setulæ $2,8 \mu$. cr., in spiram 22μ . latam convolutæ; asci clavati; octospori; sporidia oliviformia, $16-17 \times 8,4$ flavo-viridula.

Hab. in excremento Arietum in Gallia.

3. *Chætomium contortum* Bain., Bull. Soc. Mycol. Franc. XXV (1909) 3686 p. 205, t. 13, f. 5-6. — Perithecia sphæroideo-ovoidea, 300×252 , initio cyanescentia dein nigricantia; setulæ 4μ . diam., sursum in spiram 56μ . latam convolutæ; asci clavati, octospori; sporidia fusioidea, 14×9 , ex olivaceo brunnea.

Hab. in escrementis Arietum et aliorum animalium in Gallia.

4. *Chætomium undulatum* Bain., Bull. Soc. Mycol. Fr. XXV (1909) 3687 pag. 208, t. 14, f. 4-7. — Perithecia globulosa v. ovoidea, 252×224 ; setulæ 4μ . cr., undulatæ; asci oblongo-clavati, octospori; sporidia fusioidea, $14-15 \times 8$, e latere 6μ . cr., brunneola.

Hab. in frustulis ligneis terra infossis in Gallia.

5. *Chætomium setosum* Bain., Bull. Soc. Mycol. Franc. XXV (1909) 3688 p. 209, t. 18, f. 3-7. — Perithecia subsphærica, 280×252 ; setulæ basi 4μ . cr., bifformes; spira 25μ . cr.; asci clavati, octospori;

sporidia subsphærica, 8-10 μ . diam., utrinque minutissime apiculata.

Hab. in palea uda in Gallia.

6. *Chætomium comosum* Bain., Bull. Soc. Mycol. Franc. XXV (1909) 3689 pag. 211, t. 17, f. 5-8. — Perithecia initio cyanescentia, ovoidea, 200 \times 160; setulæ 240-280 μ . long. in spiram 16-20 μ . latam convolutæ; asci clavati, octospori; sporidia sphæroidea, cyanescentia 4-6 μ ., diam., subinde versiformia.

Hab. in fimo equino in Gallia.

7. *Chætomium tortile* Bain., Bull. Soc. Mycol. France, XXV (1909) 3690 p. 214, t. 22. — Perithecia subsphærica 370 μ . diam., virentia; setulæ bifformes, 5,6 μ . diam.; asci cylindracei octospori; sporidia nunc sphæroidea 8 μ . diam., nunc ovoidea 8 \times 6, monosticha

Hab. in Gallia (matrice non indicata).

8. *Chætomium glabrum* Bain., Bull. Soc. Mycol. France XXV (1909) 3691 pag. 214, t. 21, f. 1-4. — Perithecia deorsum ad $\frac{2}{3}$ v. $\frac{3}{4}$ glabra, 367 μ . diam., superne nigricantia, deorsum subincoloria; asci cylindracei, octospori; sporidia e sphærico ovoidea, 10 \times 8, e latere 6,5 μ . lat., brunneola.

Hab. in excremento canino in Gallia.

9. *Chætomium formosum* Bain., Bull. Soc. Mycol. Fr. XXV (1909) 3692 pag. 215, t. 20, f. 6-9. — Perithecia 294 μ . alta, 196 (basi) lat.; setulæ 3,5 μ . crassæ, in spiram basi 42, supra 25 μ . diam. convolutæ; asci clavati, octospori; sporidia subsphærica, 4-6 μ . diam., utrinque minutissime apiculata, griseo-cyanescentia.

Hab. in fimo Arietum in Gallia. — Var. *ovatum* Bain., l. c. p. 216, t. 20, f. 1-5. — Dignoscitur peritheciis ovoideis, 490 \times 260; sporidia sphærica et subinde ovoidea, cyanescentia, 6 \times 4-5,6. — In Gallia (matrice non indicata). — Var. *neglectum* Bain. l. c. — Imprimis setularum spira sursum sensim tenuata, non æquali dignoscendum. — In Gallia (matrice non indicata).

10. *Chætomium caprinum* Bain., Bull. Soc. Mycol. Fr. XXV (1909) 3693 p. 223, t. 14, f. 1-3. — Perithecia ovoideo-piriformia, 525 \times 225, translucida; setulæ 180 \times 3, longiores 275 μ . long.; asci ovoidèi, octospori; sporidia subsphærica, 7 μ . diam., dilute olivacea, e latere compresso-fusoidea, 7 \times 5,6.

Hab. in excrementis Caprarum in Gallia.

11. *Chætomium torulosum* Bain., Bull. Soc. Mycol. France, XXV 3694 (1909) p. 224, t. 23. — Perithecia flavo-ochracea, 294 \times 148; setulæ 285 μ . long.; sporidia 8 \times 6, olivaceo-fuliginea.

Hab. in Gallia (matrice non indicata).

12. *Chætomium rigidulum* Bain., Bull. Soc. Mycol. Fr., XXV (1909) 3695 p. 228, t. 26. — Perithecia 300 μ . diam.; setulæ majores 300–400 \times 6; asci clavati, octospori; sporidia 8 \times 6, utrinque subapiculata.

Hab. in excrementis Cuniculorum in silvis, in Gallia.

13. *Chætomium Oospora* Beauverie, Etud. polymorph. pag. 215–218 3696 et fig. 65–69 (sine diagnosi). — Peritheciis globosis, verruculosis, setosis, setulis in medietate sup. perithecii prælongis, erectis, tortuosis, perithecii diametro sesquolongioribus, inferioribus multo brevioribus divergentibus vix flexis, basilaribus repentibus; ascis clavatis longiuscule sensim stipitatis, octosporis, apice rotundatis; sporidiis distichis, ovoideis, 24–25 \times 14–16 (ex icone), coloratis.

Hab. in Gallia in culturis *Oosporæ* crustaceæ, quacum vivit, et cujus, teste Beauverie, esset status ascophorus.

14. *Chætomium spirochæte* Palliser in North Am. Fl. III, pt. 1 (1910) 3697 p. 61. — Peritheciis plus minus dense gregariis, late ellipsoideis, 300 \times 225, tenuivus, fragilibus, atro-brunneis, sæpe nigris, dense piligeris; pilis basalibus et lateralibus remote septatis, levibus, brunneis, flexuosis, 3 μ . cr., apicalibus numerosis, sæpe massam dense intricatam sphæroideam, 800 μ . diam., formantibus, rectis usque ad 350 μ ., supra maxime flexuosis v. irregulariter pluries spiraliter tortis, atro-brunneis, basi 4–5 μ . cr., plus v. minus crasse incrustatis, apicem versus pallidioribus; ascis . . . ; sporidiis e subhyalino brunneis, late ovoideis, utrinque leviter apiculatis, 7–11 \times 6–9.

Hab. in charta uda putrescente, Ames Iowa Amer. bor. (L. H. PAMMEL).

15. *Chætomium flexuosum* Palliser, in North Amer. Fl. III, pt. 1 3698 (1910) p. 61. — Peritheciis sparsis v. gregariis, late ellipsoideis v. ovoideis, 300–400 \times 225–350, tenui-membranaceis, atro-brunneis v. nigris, ubique piligeris; pilis basalibus et lateralibus longis, tenuibus, flexuosis, pallide brunneis, apicalibus parcioribus, 500 \times 4–6, sursum sensim tenuatis, remote septatis, atro-brunneis, supra pallidioribus, asperulis, rectis, prope apicem vero semel v. bis laxè spiraliter convolutis; ascis . . . ; sporidiis brunneis late ovoideis v. subglobosis, utrinque subapiculatis, 9–11 \times 7–9.

Hab. in cistis vetustis, lignis et fructibus *Hordei* putrescentibus, New York, Michigan etc. Amer. bor.

16. *Chætomium aterrimum* Ell. et Ev., in Palliser North Am. Flora, 3699

III, pt. 1 (1910) p. 62. — Peritheciis sparsis, laxe adherentibus, nigris, ovoideis v. subglobosis, 275 μ . alt., apice perforatis, tenui-membranaceis, dense piligeris; pilis basalibus et lateralibus numerosis, levibus v. leviter incrustatis, flexuosis, læte brunneis, septatis, fragilibus; pilis apicalibus atro-brunneis, crasse incrustatis, basi 6 μ . cr. apice 10-12 μ . cr., usque ad 120-180 μ . rectis, sursum in spiram regularem, 400-500 μ . long. et 50-60 μ . diam., decies v. duodecies convolutis; ascis . . . ; sporidiis ellipsoideis, utrinque leviter apiculatis, flavo-brunneis, 6-7,5 \times 4-5.

Hab. in caryopsidibus Tritici putrescentibus, Rockport Kansas (E. BARTHOLOMEW).

17. *Chætomium cochlioides* Palliser, in North Am. Fl. III, pt. 1 3700 (1910) p. 61. — Peritheciis sparsis v. gregariis, late ovoideis vel globosis, 300-400 μ . diam., tenui-membranaceis, atro-brunneis, dense piligeris; pilis lateralibus et basalibus pallide brunneis, septatis, vix 4 μ . cr., sursum attenuatis, pilis apicalibus valde flexuosis a basi ipsa, sursum inæqualiter spiraliter curvis, levibus v. raro basi asperulis, copiosis, massam intricatam usque ad 700 μ . supra perithecium expansam formantibus; ascis . . . ; sporidiis e subhyalino pallide brunneis late ovoideis v. subglobosis, subinde polis subapiculatis, 9-11 \times 8-10.

Hab. in charta, fœno, cistis, storeis putrescentibus, udis, New Jersey, Louisiana etc. Amer. bor.

18. *Chætomium Elasticæ* Koord., Botan. Untersuch. (1907) pag. 185, 3701 fig. 16 I. — Peritheciis superficialibus, coriaceis, atris, ovoideis, papillato-ostiolatis, dense et longe villosis, $\frac{1}{4}$ - $\frac{1}{3}$ mm. diam., sparsis v. gregariis, pilis 350-450 \times 3; ascis clavatis, apice rotundatis et haud incrassatis, 8-sporis, 45-50 \times 15-18, aparaphysatis; sporidiis continuis, fumigatis, ellipsoideis v. subglobosis, utrinque rotundatis v. obtusis v. subacutis, 10-12 \times 6-10.

Hab. in foliis putrescentibus ex Java, Martio 1907 (KOORDERS). — *Chætomio Kunzeano* Zopf proximum.

19. *Chætomium papillosum* Cocconi, Mem. Ac. Sc. Bologna, ser. V, 3702 t. VIII (1902) p. 683, cum tabula. — Peritheciis laxe gregariis, minutis, subglobosis, superficialibus, vertice obtuso poro apertis, hyphis mycelicis radiantibus, pallidis, exilibus basi cinctis, superne vero setulis fuliginis, patenter radiantibus, filiformibus, simplicibus, apice exquisite hamatis, laxiusculis peritheci diametrum superantibus ornatis; ascis crasse cylindraceis, apice rotundatis, breviter tenuato-stipitatis, octosporis, aparaphysatis; sporidiis monostichis,

ovoideis, levibus, hyalinis, basi v. apice papilla conoidea, brevi, equidem hyalina auctis.

Hab. ad ligna putrida pr. Bononiam. — Teste auctore simul adsunt status conidiophorus (*Stachybotrys?*) et pycnidicus (*Diplodia*). Dimensiones omnes desiderantur! Ob sporidia hyalina vix hujus generis.

SORDARIA Ces. et De Not. — Syll. I p. 230, IX p. 487, XIV p. 492, XVI p. 430, XVII p. 601.

1. **Sordaria Lappæ** Potebnia, Myc. Stud. in Ann. Myc. V (1907) p. 13 3703 et Travaux Soc. Nat. de Kharkov, XXXVIII (1907). — Peritheciis erumpentibus, piriformibus $450 \approx 200$, collo $120-150 \approx 16$; sporidiis ellipsoideis, nigris, $21 \approx 14-15$.

Hab. in caulibus putrescentibus Lappæ majoris, socio *Helminthosporio brachyclado*, in Rossia media.

2. **Sordaria hirsuta** (Dang.) Sacc. et Trav. Syll. XX, pag. 807, Po. 3704 *dospora hirsuta* Dangeard in Botaniste X (1907) pag. 345, t. 81 (sine diagnosi). — Peritheciis semiimmersis, globoso-conoideis, brunneo-nigricantibus, collo longiusculo saepe curvulo præditis, mycelio albo v. brunneo perithecia investiente et connectente, hyphis septatis, crassiuscule tunicatis; sporidiis initio cylindræis hyalinis $15 \approx 2-3$, dein ellipsoideis atro-brunneis $25-30 \approx 14$, cauda hyalina 20 longa auctis.

Hab. in excrementis? ... sed culta tantum observata, in Gallia. — Præcipue indumento copioso albo-brunneo dignoscenda videtur.

HYPOCOPRA Fuck. — Syll. I p. 240, IX p. 490, XI p. 279, XVI p. 433, XVII p. 605.

1. **Hypocopra fimicola** (Rob.) Sacc. — Syll. I, p. 240. — var. *felina* 3705 Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 341. — A typo vix recedit partibus omnibus paululo majoribus; peritheciis 250μ . diam.; ascis $200 \approx 20$; sporidiis $22-24 \approx 14-16$.

Hab. ad stercus felinum putrescens, La Plata, Rep. Argentina Amer. austr.

2. **Hypocopra capturæ** (Speg.) Sacc. — Syll. I, p. 242. — var. *disco-* 3706 *papillata* Starb., in Arkiv för Bot. V (1905) pag. 15 (extr.). — A typo differt: ascis $200-250 \approx 19-21$, sporidiis $25-30 \approx 12-14$ nec non peritheciis late ostiolatis, ostiolo disciformi centro pertuso supra matricem elevato.

Hab. in fimo ovino, prov. Salta Argentina.

Pyrenomycetæ, Sphæriaceæ, Sphærella.

PROLEPA Fuck. — Syll. I p. 248, IX p. 493, XVI p. 434, XVII p. 608.

Caprolepa equorum Fuck. — Syll. I, pag. 249. — var. *leporina* 3707
Niessl ap. Rehm, Hedw. XXVIII (1889) p. 356. (*Hypocopra*). —
— Peritheciis glabris, basi hyphis brunneis, 2,5 μ . cr., septatis
cinctis; ascis 180 \times 12-14, apice incrassatis rotundatisque, octosporis;
sporidiis ellipsoideis, obtusis, crasse tunicatis, atro-brunneis,
18-24 \times 7-8, monostichis; paraphysibus filiformibus, 3 μ . cr.

Hab. in fimo leporino in silvis pr. Ratschitz Moraviæ. —
Inter *C. equorum* et *C. merdarium* media.

HÆOBOTRYOSPHÆRIA Speg., Ann. Mus. Nac. Buenos Aires t. XVII
(1908) p. 120 (Etym. *phæos* fuscus et *Botryosphæria*). — Stromata
pulvinata v. plus minus evoluta, erumpenti-superficialia; perithecia
stromate inserta et plus minus infossa, atra, subcoriacea. Spori-
dia elliptico-rhomboidea, continua, fuliginea, octona.

Phæobotryosphæria Yerbæ Speg., l. c. p. 120, cum icon. — Peri- 3708
theciis subsparis v. aggregatis et stromate plus v. minus evoluto
connexis, globoso-lenticularibus, papillato-ostiolatis, coriacellis, a-
tris, albo-farctis, 200 μ . diam., contextu grosse et parum distincte
parenchymatico, fuligineo; ascis clavatis, apice rotundatis, crassi-
simeque tunicatis, 150-180 \times 30-35, paraphysibus nullis v. parvis et
spuriis obvallatis, brevissime noduloso-pedicellatis; sporidiis disti-
chis, ellipsoideis, sæpius rhomboideo-navicularibus, utrinque obtu-
sulis, 30-40 \times 14-20, eguttulatis, opace fuligineis, levibus.

Hab. ad ramulos emortuos *Ilicis paraguariensis* (Mate),
Misiones Argentinae.

Sect. 4. Hyalodidymæ.

SPHÆRELLA Ces. et De Not. (*) — Syll. I p. 476, IX p. 611, XI
p. 295, XIV p. 525, XVI p. 468, XVII p. 635.

(*) De præferendo nomine *Sphærella* loco *Mycosphærellæ* cfr. quæ diximus
in BRIQUET *Rec. des docum. destinés à servir de base aux débats au Congr.
internat. de Bot. de Bruxelles* (1910) p. 46. Nempe: *Sphærella* (Fr. 1849) Ces.
et De Not. 1863 (species nunc ultra 700!) est nomen conservandum et e contra
est rejicendum nomen *Mycosphærella* Johans., 1884 ex parte [non *Mycosphærella*
Johans. emend. Sacc. 1891], nam gen. antierius *Sphærella* Somm., 1824, constat
ex unica specie valida, sed mox mortua, quæ jam ab anno 1828 *Hæmatococcus*
audit.

1. **Sphærella Alyssi** Hollós, Ann. Mus. Nat. Hungar. V (1907) p. 44. 3709
— Peritheciis gregariis, epidermide velatis, depresso-globosis, fuscis, punctiformibus, pertusis, 50-70 μ . diam., contextu parenchymatico; ascis ovoideis vel clavatis, breve stipitatis, octosporis, 24-30 \times 9-10, aparaphysatis; sporidiis 2-3-stichis, oblongis, medio 1-septatis, non constrictis, hyalinis, 9-10 \times 3-4.

Hab. in caulibus siccis Alyssi tortuosi prope Kecskemét, Hungariæ.

2. **Sphærella persica** (Syd.) Sacc. et Trott., *Mycosphærella persica* 3710
Syd., Ann. Mycol. VI (1908) p. 529. — Peritheciis sparsis v. irregulariter aggregatis, minutis, plerumque in partibus matricis cinereo-tinctis sitis, epidermide tectis, globosis, atris, nitidis, poro rotundo usque ad 30 μ . lato apertis, 70-140 μ . diam., contextu parenchymatico, brunneo, circa porum obscuriore; ascis ovoideis v. subcylindraceis, breviter stipitatis, 45-70 \times 17-25, octosporis; sporidiis distichis oblongis, medio 1-septatis, non constrictis, utrinque rotundatis, hyalinis, 14-21 \times 6-7, cellula super. subinde paullo latiore.

Hab. in caulibus emortuis Morieræ stenopterae in Monte Kuh Parrau Persiæ occid. (Th. Strauss).

3. **Sphærella andina** Speg., An. Mus. Nac. Buenos Aires t. XIX 3711 (1909) pag. 350. — Maculis nullis; peritheciis laxè gregariis primum epidermide velatis dein plus minusve denudatis, udis subglobosis 90-120 μ . diam. minute papillato-ostiolatis, submembranaceis; ascis crasse cylindraceis, 70-80 \times 20-24, aparaphysatis octosporis; sporidiis ex ellipsoideo subclavulatis rectis, 18-20 \times 6, medio 1-septatis non v. vix constrictis, hyalinis (an postremo dilute fumosis?).

Hab. ad scapos aridos Thlaspeos andicolæ prope Lago Blanco, Patagonia Amer. austr. — Species cum *S. Cruciferarum* (Fr.) Sacc. non comparanda.

4. **Sphærella Theobromæ** F. C. v. Faber in Arbeit. K. Biol. Anst. 3712
Berlin VII (1909) p. 219. — Maculis pallidissime brunneis v. flavidis, margine succineo dein atro-brunneo, elevato cinctis; peritheciis innatis, nigris, dein ostiolo brevi nigro præditis; ascis clavatis, 8-sporis; sporidiis fusoideis, 17 μ . long., continuis visis sed forte immaturis.

Hab. in fructibus, Phytophthorâ infectis et necatis, Theobromæ Cacao, Camerun Afric. trop. Forte species damnosa.

5. **Sphærella Boquilæ** Speg. Fungi Chilenses (1910) p. 53. — Macu. 3713

lis nullis; peritheciis hypophyllis, sparsis v. laxe gregariis, lenticularibus, minutis nigris, epidermide tectis, 90-100 μ . diam.; ascis sublaceolatis, apice crasse tunicatis, basi brevissime pedicellatis, 40 \approx 12, sporidiis conglobatis, subclavulatis, non v. vix inæquilateralibus, non constrictis, parvis, hyalinis, 12-13 \approx 3.

Hab. in foliis siccis Boquilæ trifoliatæ in silvis prope Cerro Carracol de Concepcion, Chile Amer. austr.

6. **Sphærella Lardizabalæ** Speg., Fungi Chilenses (1910) pag. 55. — 3714

Maculis nullis; peritheciis laxe gregariis innato-erumpentibus, nigris coriaceis, ostiolo minuto pertusis, 75-90 μ . diam.; ascis lanceolatis brevissime pedicellatis, aparaphysatis; sporidiis subconglobatis subclavulatis, hyalinis, parvulis, distichis v. tristichis, 10-12 \approx 2,5-3.

Hab. in foliis dejectis subputrescentibus Lardizabalæ biterminatæ, Cerro Caracol de Concepcion, Chile Amer. austr.

7. **Sphærella rhoïna** Sacc., Ann. Mycol. VI (1908) p. 561. — Macu. 3715

lis peculiaribus nullis, sed folio toto arescendo brunneo; peritheciis hinc inde densiuscule congregatis, punctiformibus, perexiguis, plerumque hypophyllis, hemisphæricis, prominulis, nitidulis poro minuto pertusis, 70-80 μ . diam.; ascis cylindræis, apice rotundatis, basi tenuato-subsessilibus, 30-36 \approx 5,5-6, octosporis, aparaphysatis, initio fasciculatis; sporidiis distichis tereti-fusoideis, utrinque obtusulis, 1-septatis, non v. vix constrictis, 7-8 \approx 2, hyalinis.

Hab. in foliis putrescentibus Rhois Toxicodendri, pr. Tamsel Germaniæ (P. VOGEL).

8. **Sphærella maculiformis** (Pers.) Auersw. — Syll. I, p. 477, var. **Hip-** 3716

pocastani Jaap in Abhandl. Bot. Ver. Brandenb. LII (1910) p. 141. — Præcipue dignoscitur sporidiis majoribus 12-17 \approx 3-3,5, tereti-clavulatis, supra medium septatis, distichis, ascis cylindræis 40 \approx 7.

Hab. in foliis Aesculi Hippocastani pr. Triglitz Borussiae. — *Septoria Aesculi* videtur ex auctore status pyrenidicus.

9. **Sphærella Violæ** (A. Pot.) Sacc. et Trav., Syll. XX p. 829, *My-* 3717

cosphærella Violæ A. Potebnia, Ann. mycol. (1910) p. 51, f. 5:3. — Peritheciis 150-170 μ . diam., subimmersis, ostiolo verruciformi præditis; ascis 60-85 \approx 18-20; sporidiis 21 \approx 5-6, cylindræis, medio septatis.

Hab. in foliis hibernantibus Violæ hirtæ, Gouv. Kursk Rossia. — Huc pertinent verisimiliter, ut formæ metageneticæ: *Cercospora Violæ*, *Ramularia lactea*, *Septoria Violæ*.

10. *Sphærella silenicola* Hollós, Ann. Mus. Nat. Hungar. VII (1909) 3718 p. 51. — Peritheciis epidermide tectis, sparsis, sphaeroideis, nigris, breve papillatis, 140-180 μ . diam., contextu celluloso; ascis fasciculatis, clavatis, estipitatis, vertice rotundatis et crasse tunicatis, 8-sporis, 48-60 \times 18-22, aparaphysatis; sporidiis 2-3-stichis, oblongo-ellipsoideis, medio 1-septatis non constrictis, 2-4 guttulatis, 20-22 \times 6-7.

Hab. in caulibus siccis *Silenes Otitis* prope Kecskemét Hungariæ.

11. *Sphærella gypsophilicola* Hollós, Ann. Mus. Nat. Hungar. V 3719 (1907) p. 44. — Peritheciis dense gregariis, epidermide velatis, globulosis, prominulis, nigris, punctiformibus, pertusis, 100-120 μ . diam., contextu parenchymatico; ascis ovoideis v. oblongis, sessilibus, octosporis, 36-40 \times 12-14, aparaphysatis; sporidiis oblongo-ellipsoideis, rectis curvulisve, medio 1-septatis, non constrictis, 4-guttulatis, hyalinis, 16-18 \times 4-5.

Hab. in caulibus siccis *Gypsophilæ paniculatæ* prope Kecskemét Hungariæ.

12. *Sphærella arenaricola* (Bubak) Sacc. et Trott., *Mycosphaerella* 3720 *arenaricola* Bub. in Handel-Mazzetti, Bot. Reise Pont. Randgeb. in Ann. Naturhist. Hofmus. Wien XXIII (1909) p. 103. — Peritheciis hypophyllis, rarius epiphyllis, fere æqualiter sparsis, parum immersis, basi globosis, parte libera conica, aterrimis, opacis, contextu nigro-brunneo, 80-120 μ . latis; ascis oblongis 30-45 \times 9-11, sæpe curvatis, crasse tunicatis, breve stipitatis, aparaphysatis, octosporis; sporidiis fusoides 9-11 \times 2,5-3,5, in medio uni-septatis, utrinque attenuatis et rotundatis, hyalinis.

Hab. in foliis *Arenariæ rotundifoliæ*, in montibus ponticis Anatoliæ. — *Sph. Pulvisculæ* proxima.

13. *Sphærella Silenes-acaulis* Maire, Oesterr. Bot. Ztschr., LVII 3721 (1907) p. 335. — Peritheciis sparsis v. gregariis, primo immersis, dein erumpentibus, globosis, 130-180 μ . diam., nigris, levibus, ostiolo minuto vix papillato pertusis; ascis sessilibus, oblongo-cylindræis, 35-43 \times 12-13, octosporis; sporidiis distichis, fusoides, utrinque obtusis, medio septatis, non constrictis, levibus, hyalinis, 9-13 \times 2,5; paraphysibus nullis.

Hab. in pedunculis, calycibus, foliisque exsiccatis *Silenes acaulis*, Hühnerspiel Tirolæ, alt. 2300 m. — Affinis *Sph. sibiricæ* et *S. subnivali*.

14. *Sphærella citrullina* C. O. Smith, Delaw. Exper. Stat. Bull. 70 3722

(1905), *Mycospharella citrullina* (C. O. Sm.) Grossenbacher, Techn. Bull. N. York Agric. Exp. Station n. 9 (1909) p. 226, t. I-VI. — Peritheciis globoso-depressis v. obconoideis, atro-brunneis vel nigris; rugulosis, pro more ostiolato-papillatis, simplicibus, dense sparsis, erumpentibus, denique subsuperficialibus, 100-165 μ . diam.; ascis cylindraceis v. tereti-clavatis, aparaphysatis, subsessilibus, 45-58 \times 7-10; sporidiis plerumque monostichis, bicellularibus, hyalinis, oblongo-fusoideis, vel fusoideis, modo non constrictis, modo cellulis, præcipue superiore, tumidulis et tunc constrictis, 10-12 \times 3,5-4.

Hab. in caulibus Cucumeris Melonis, C. sativi et probabiliter Citrulli vulgaris, quibus valde nocet in America boreali et in Italia (TURCONI). — Status pycnidicus est *Diplodina citrullina*. — Fusiorem notitiam de specie et ejus synonymia videas apud Grossenbacher l. c.

15. **Sphærella Tamaricis** Hollós, Ann. Mus. Nat. Hung. IV (1906) 3723 p. 332. — Peritheciis epidermide tectis, gregariis, depresso-globosis, nigris, apice pertusis, 140-180 μ . diam.; ascis clavatis, estipitatis, 8-sporis, 70-80 \times 16-18 aparaphysatis; sporidiis oblique monostichis v. inordinate distichis, oblongis, medio 1-septatis, constrictis, utrinque rotundatis, initio hyalinis, dein flavidulis, 20-22 \times 10-12, loculo superiore plerumque paullo crassiore.

Hab. in ramulis siccis Tamaricis africanæ, Kecskemét Hungariæ.

16. **Sphærella viticola** Hollós, Ann. Mus. Nat. Hung. V (1907) p. 454. 3724 — Peritheciis subcutaneo-erumpentibus, gregariis v. sparsis, globulosis, nigris, 140-210 μ . diam., ostiolo punctiformi, contextu parenchymatico; ascis clavatis, breviter stipitatis, 6-8-sporis, 80-90 \times 18-24, aparaphysatis; sporidiis inordinate distichis, oblongis, utrinque rotundatis, medio 1-septatis, leviter constrictis, initio hyalinis, dein flavidulis, pluriguttulatis, 26-28 \times 9-10 loculo superiore, paullo crassiore.

Hab. in sarmentis semivivis Vitis viniferæ prope Kecskemét Hungariæ. — A ceteris speciebus *Sphærellæ* in Vite vigentibus satis distincta.

17. **Sphærella Vogelii** Syd., Mycoth. germ. fasc. XIV-XV, n. 681 3725 (1908) et in Ann. Mycol. VI (1908) p. 480. — Peritheciis hypophyllis, dense sparsis v. gregariis, immersis, atris, membranaceis, subglobosis, 60-125 μ . diam.; ascis fasciculatis, aparaphysatis, clavatis, sessilibus vel brevissime stipitatis, apice rotundatis, 42-50 \times

9-11, octosporis; sporidiis distichis, oblongo-fusoides, circa medium septatis, subinde loculo superiore latiore sed brevior, tandem constrictis, hyalinis, $15-22 \approx 3-4 \frac{1}{2}$.

Hab. in foliis putrescentibus *Rhamni Catharticæ*, Tamsel, Marchia Brandenburg (P. Vogel).

18. *Sphærella asunciensis* (Starb.) Sacc. et Trott., *Mycosphærella a.* 3726

sunciensis Starb. Ascomyc. Schwed. Chaco-Cordill. Exp., Arkiv. f. Bot. Bd. V (1905) pag. 21, fig. 15. — Peritheciis epiphyllis epidermidem utriusque paginæ paullum pustulatim elevantibus, ostioli rimosim prominentibus, aggregatis et maculas orbiculares vel varie determinatas, 2-3 mm. diam., obscuriores efformantibus, minutissimis, circa 150 μ . diam.; ascis aparaphysatis, cylindræis v. cylindræo-obclavatis, vel fusiformibus, sessilibus, sursum incrassatis, $100-127 \approx 12,7-15$; sporidiis octonis, irregulariter monostichis vel nonnullis distichis, interdum inferioribus conglobatis, clavulatis, sursum obtusis, deorsum anguste v. fere caudatim attenuatis, cauda interdum paullum curvata, medio-septatis, endoplasmate grumoso vel guttulis quatuor ornatis, hyalinis, $29-33 \approx 6-7$.

Hab. in foliis vivis *Trichiliæ* sp. villa Morro, Asuncion, Paraguay (MALME). — Pycnidia peritheciis similia adsunt: sporulis numerosissimis, bacillaribus, hyalinis, $6-8 \approx 1-2 \mu$. e basidiis filiformibus $19-25 \approx 1-2$ orientibus. — Inter *Sphærellas* sporidiis majoribus *S. elatiori* Sacc. affinis, maculis autem et peritheciis parasitantibus nec non sporidiis valde differt.

19. *Sphærella Molleriana* Thüm. - Syll. I, p. 491 — var. *megalospora* 3727

Da Câmara, Bol. Soc. Broteriana, XXV (1910) Extr. pag. 7. — Peritheciis sæpe sparsis, haud vel in macula fere nulla dispositis; ascis late obclavatis, hyalinis, subsessilibus, octosporis, $50-60 \approx 18-20$; sporidiis di-tristichis, claviformibus, hyalinis, medio septatis, non v. vix constrictis, utrinque guttulatis, $20-25 \approx 6-8$.

Hab. in foliis *Eucalypti* sp., prope Coimbra, Cerca de S. Bento, Lusitaniæ (A. MOLLER).

20. *Sphærella conspicua* Syd., Ann. Mycol. V (1907) pag. 356. — 3728

Maculis amphigenis, valde conspicuis, orbicularibus vel suborbicularibus, confluyendo sæpe irregularibus, $\frac{1}{2}-1$ cm. diam., bene limitatis, fusco-brunneis; peritheciis amphigenis plerumque dense aggregatis, punctiformibus, tenui-membranaceis, immersis, atris, globulosis, poro pertusis, $70-110 \mu$. diam.; ascis fasciculatis, clavatis, apice rotundatis, non incrassatis, basi attenuatis, aparaphysatis, $50-72 \approx 11-14$, octosporis; sporidiis distichis, elongatis, utrinque

obtusiusculis, rectis v. leniter curvulis, medio 1-septatis, non constrictis, hyalinis vel chlorino-hyalinis, $24-28 \times 3-3\frac{1}{2}$.

Hab. in foliis *Myrsines* spec., prov. Minas Geraes, Confins, Brasilia.

21. **Sphærella antivarensis** Bubák, Bull. Herbar. Boiss. 2 sér. VI 3729 (1906) p. 399. — Peritheciis sparsis v. hinc unde aggregatis, basi tantum insculptis, subsuperficialibus, globoso-depressis, nigris, $130-160 \mu$. diam., contextu atro-brunneo, inferne vere subhyalino; ascis ovoideo-clavatis, breviter stipitatis, $30-35 \times 11-15$, aparaphysatis; sporidiis oblongis, $11-13 \times 4-4,5$, hyalinis, bicellularibus, cellula superiore latiore.

Hab. in ramulis adhuc vivis *Myrti* communis pr. Bar, Antivari, Montenegro.

22. **Sphærella Tormetillæ** (Sacc.) Trav. MS. — *Sph. Ariadna*, subsp. 3730 *Tormetillæ* (Sacc.) in Mich. I, p. 379 (1878). — Syll. I, p. 504. — Maculis irregulariter ellipsoideis, parvis, 2-3 mm. longis, pallide isabellinis, arescendo albicantibus, rufo-cinctis; peritheciis in quaque macula paucis, innato-erumpentibus, globoso-depressis, nigris, $50-60 \mu$. latis, poro angusto circulari pertusis; ascis late obovatis, basi acutatis, $22-25 \times 14-15$; sporidiis imbricato-subtristichis, cylindraceo-fusoideis, utrinque obtusis, modice sed distincte curvulis, medio tenuiter septatis et parum constrictis, minute 4-guttulatis, hyalinis, $8-10 \times 2\frac{1}{2}-3$.

Hab. in foliis languidis *Tormetillæ* erectæ, in silva «Montello», Treviso, Ital. bor. — Affinis *Sph. Ariadnæ* Sacc. sed sporidiis minoribus et præcipue matrice aliena distinguenda species.

23. **Sphærella Cydoniæ** Vogl., Ann. R. Acc. Agric. Torino XLVIII, 3731 1905, p. 16 (extr.); Atti R. Acc. Sc. Torino v. XLIII (1907-1908) p. 92 (246). — Maculis exaridis 2-5 mm. latis, subrotundis, epiphyllis, rarissime hypophyllis; peritheciis nigris (6-8-10), sparsis v. gregariis, immersis, inde epidermidem perforantibus, prominulis, sphæroideis, plus vel minus conoideo-attenuatis, ostiolo lato hiantibus, $100-120 \mu$. latis; ascis oblongo-v. ovoideo-clavatis, brevissime pedicellatis, medio irregulariter incrassatis, $60-70 \times 12-14$; ascosporis ovoideo-ellipsoideis, v. fusoideis, leniter incurvatis, raro ad sepimentum leniter constrictis, loculis subæqualibus, chlorino-hyalinis, $20-22$ (raro $20-26$) $\times 5-7$ (raro usque ad 8μ .), 4-guttulatis.

Hab. in foliis siccis *Cydoniæ vulgaris* in Pedemontio Italiæ bor.

24. *Sphærella valeppensis* (Rehm) Sacc. et Trott., *Mycosphærella va-* 3732
leppensis Rehm, Oesterr. bot. Ztschr. LVI (1906) pag. 295. —
 (Nomen nudum).

Hab. in foliis Dryadis octopetalæ in Valepp, Bavaria.

25. *Sphærella Acenæ* P. Henn., Deutsche Südpolar-Exped. VIII (1906) 3733
 p. 9 (extr.). — Maculis irregularibus sparsis, fuscidulis; peritheciis epiphyllis innato-erumpentibus, sparsis vel gregariis, subglobosis v. lenticularibus, atro-fuscis, membranaceis, poro pertusis, 60-80 μ . diam.; ascis fasciculatis, clavatis, apice rotundatis, tunicatis, paraphysatis, octosporis, 30-40 \times 8-10; sporidiis ellipsoideis v. subclavatis, obtusis, medio 1-septatis, hyalinis, subdistichis, 7-8 \times 3,5-4.

Hab. in foliis vivis *Acenæ* ascendentis, Kerguelen-Station in ins. Kerguelen (E. WERTH).

26. *Sphærella Oxyacanthæ* (Jaap) Sacc. et Trott., *Mycosphærella O-* 3734
xyacanthæ Jaap, Abh. Botan. Ver. Prov. Brandenb. II (1907) p. 15. — Peritheciis hypophyllis, gregariis laxiusculis, innatis, dein ostiolo erumpentibus, prominulis, globulosis, 100-140 μ . diam.; ascis tereti-fusoideis, sursum tenuato-rotundatis, fasciculatis, paraphysatis 50-60 \times 9-12 (sæpius 10), octosporis, pedicello vix 4-5 μ . longo; sporidiis distichis, tereti-fusoideis v. clavulatis, leviter curvis, bicellularibus, 20-24 \times 4-5, eguttulatis, articulo super. paullo crassiore es sæpe brevior.

Hab. in foliis *Cratægi Oxyacanthæ*, socio st. conid.

Phleospora Oxyacanthæ, pr. Triglitz Borussiae.

27. *Sphærella Erythrinae* (Koord.) Sacc. et Trav. - Syll. XX, p. 820, 3735
Mycosphærella Erythrinae Koord., Botan. Untersuch. (1907) p. 189, fig. 15 (7-14). — Peritheciis epiphyllis in maculis circularibus are-scendo albescentibus, sparsis, tectis, coriaceis, nigris, glabris, ostiolo papilliformi erumpente 50-60 μ . diam., ascis clavatis, apice valde incrassatis, fasciculatis, 8-sporis, 40-42 \times 10-12; sporidiis hyalinis, cylindraceis, rectis v. curvulis, initio continuis, dein medio 1-septatis, utrinque rotundatis, 14-15 \times 3-3,5 sub 2-3-seriatis.

Hab. in foliis vivis *Erythrinae ovalifoliae* prope Sadang prov. Kedu, Java (KOORDERS).

28. *Spaærella Onobrychidis* Hollós, Növényt. Közlemén., VI (1907) 3736
 Extr. p. 2. — Peritheciis epidermide tectis, gregariis, depressoglobosis, nigris, apice pertusis, 100-160 μ . diam., contextu parenchymatico; ascis clavatis, estipitatis, 6-8-sporis, 60-80 \times 20-24, paraphysatis; sporidiis inordinate distichis, oblongis, medio 1

septatis, constrictis, utrinque rotundatis, pluriguttulatis, hyalinis, 22-24 \approx 8-9, loculo superiore plerumque paullo crassiore.

Hab. in caulibus siccis Onobrychidis sativæ, prope Keskmet Hungariæ.

29. **Sphærella Jaczewskii** (A. Pot.) Sacc. et Trav. - Syll. XX p. 822 3737

- *Mycosphærella Jaczewskii* A. Potebnia, Ann. mycol. (1910) p. 50, f. 2 et f. 5:2. — Peritheciis amphigenis, ampulliformibus, sub-superficialibus, nigris, ostiolo subverruciformi, 120-140 \approx 150-170; ascis cæspitosis, basi v. medio inflatis, 55-70 \approx 12-14; sporidiis sine ordine distributis, hinc inde congregatis circiter 21-23 \approx 5-6 sed ætate variabilibus, ad septum non constrictis, loculo inferiori paullo angustiori.

Hab. in foliis hibernantibus Caragane arborescentis a *Pleospora Caragane* invasis, Gouv. Kursk, Rossia. — Perithecia ex sclerotilis statui micropycnidico consociatis. Micropycnidiiis 70-100 μ . diam. sporulis bacillaribus 3 \approx 0,5 (= *Phyllosticta Borszczowii* Thüm.?)

30. **Sphærella Lathyri** (A. Pot.) Sacc. et Trav. - Syll. XX, p. 823 - 3738

Mycosphærella Lathyri A. Potebnia, Ann. mycol. (1910) p. 51 f. 4. — Peritheciis 140-160 \approx 120-140, erumpenti-subsuperficialibus, globoso-papillatis, ostiolo brevi verruciformi præditis et pertusis stromate rudimentali basi circumdatis; ascis clavatis breve stipitatis apice rotundatis, 60 \approx 16; sporidiis hyalinis 16-17 \approx 3,5, medio septatis, non constrictis, apice rotundatis, cellula sup. paullo latiori.

Hab. in foliis hibernatis Lathyri pisiformis pr. Kursk Rossia. — Sociæ adsunt *Phleospora Caragane* var. *Lathyri* et *Phyllosticta minussinensis* (?) quæ status ejusdem speciei habendæ sunt.

31. **Sphærella carinthiaca** (Jaap) Sacc. et Trott., *Mycosphærella ca-* 3739

rinthiaca Jaap, Ann. Mycol. VI (1908) p. 210. — Maculis sæpius internerviis, superne brunneis, inferne griseo-virentibus; peritheciis gregariis copiosis, hypophyllis, minutissimis, globosis, 40-90 μ . diam., poro rotundo 12-15 μ . diam. pertusis, atro-brunneis; ascis oblongis, dein cylindræis, apice rotundatis, fasciculatis, sessilibus, apophysatis, 34-40 \approx 8-10, octosporis; sporidiis oblongo-fusoides vel clavulatis, rectis v. curvulis, 10-14 \approx 2,5-3, bicellularibus, ad septum medium non constrictis, hyalinis, di-tristichis.

Hab. parasitica in foliis vivis Trifolii medii pr. Obersee-land in Alpibus austriacis.

32. **Sphærella Magnusiana** (Jaap) Sacc. et Trott., *Mycosphærella Ma-* 3740

gnusiana Jaap, Ann. Mycol. VI (1908) p. 209. — Peritheciis gre-

garis, perexiguus, nigris, globosis, 80-100 μ . diam.; contextu parenchymatico atro-brunneo; ascis versiformibus, ellipsoideis v. clavulatis, sæpe quoque saccatis, sursum tenuatis, obtusulis v. rotundatis, 36-40 \times 12-20, octosporis, aparaphysatis; sporidiis irregulariter positis, oblongo-ovoideis v. breviter clavatis, utrinque rotundatis, 15-17 μ . long., bicellularibus, hyalinis, 2-4-guttatis, cellula sup. 6-7 μ . cr., inferiore 5-6 μ . cr.

Hab. in foliis vivis Astragali alpini pr. S. Ulrich et pr. Bad Ratzes in Alpibus austriacis.

33. *Sphærella Crotalariae* Petch, Ann. Roy. Bot. Gard. Peradeniya 3741

III (1906) Pt. I, p. 2. — Maculis latis, pallide brunneis zonatis; peritheciis gregariis, erumpentibus, atris 200 μ . diam.; ascis cylindræis, octosporis, 42 \times 13; sporidiis distichis, fusoideis, 1-septatis, hyalinis, 17-18 \times 4-5.

Hab. in foliis *Crotalariae striatæ* in ins. Ceylon. — Ad-sunt pycnidia (*Phyllosticta Crotalariae* dicenda) erumpentia, peritheciis mixta, nigra, 90-130; sporulis ellipsoideis, continuis, hyalinis, 6-9 \times 2-3, in cirrum expulsis. Adest quoque st. conidiophorus (*Cercospora Crotalariae* dicenda): conidiis hyalinis rectis v. subcurvatis, multiseptatis, apice v. latere hypharum fasciculatarum minute papillatarum dispositis, in maculis brunneis.

34. *Sphærella cuprea* Sacc., Ann. Mycol. VII (1909) p. 432. — Ma- 3742

culis amphigenis, lateritio-cupreis, e circulari angulosis, 4-6 mm. diam., confluentibus, margine (præcipue in maculis epiphyllis) parum elevato, angustissimo nigricante cinctis; peritheciis dense gregariis, globosis v. globoso-lenticularibus, in epiphyllis evidentioribus et nitidulis, 80-120 μ . diam., poro centrali pertusis, nigricantibus; ascis fasciculatis oblongo-clavulatis, subsessilibus, apice obtusis, 35-50 \times 6, aparaphysatis, octosporis; sporidiis subdistichis, fusoideis, utrinque obtusiusculis, 14-15 \times 2,5-2,7 medio 1-septatis, non constrictis, hyalinis, sæpe curvulis.

Hab. in foliis languidis *Ceratonie Siliquæ* in Horto botanico neapolitano (L. CUFINO). — A *Sphærella Ceratonie* Pass. videtur omnino diversa.

35. *Sphærella eryngiicola* Speg. Fungi Chilenses (1910) p. 53, cum 3743

icon. — Maculis nullis; peritheciis amphigenis immersis inter nervationes subseriatis, subconoideis, glabris, atris, membranaceis, 50-90 μ . diam.; ascis obclavulatis brevissime pedicellatis, 30 \times 5-6; sporidiis subclavulatis ad medium 1-septatis, non vel vix constrictis, hyalinis, 10 \times 2,5.

Hab. in foliis siccis subputrescentibus *Eryngii* paniculati, Cerro Caracol de Concepcion, Chile America austr. — *A. Sph. Eryngii* (Wallr.) Cke. omnino diversa.

36. *Sphærella fœniculina* Speg., Fungi Chilenses (1910) pag. 54. — 3744
Maculis nullis; peritheciis confertiusculis, epidermide tectis, sublenticularibus, 100-120 μ . diam., membranaceo-coriallaceis, glabris, nigris, ostiolo minuto perforatis; ascis ovato-elongatis subsessilibus; sporidiis conglobatis cylindraceo-subclavulatis 1-septatis non vel vix constrictis, 18-20 \approx 5-6, hyalinis.

Hab. in foliis *Fœniculi* piperiti in collibus circa Batuco Chile Amer. austr.

37. *Sphærella Fœniculi* Speg., An. Mus. Nac. Buenos Aires t. XIX 3745 (1909) p. 353. — Maculis nullis sed matrice tota sordidiuscule cinerescente; peritheciis laxiuscule gregariis, epidermide velatis numerosissimis, e lenticulari conoideis, 75-100 μ . diam., minute papillulato-ostiولاتis, atris glabris coriallaceis; ascis cylindraceo-clavulatis crasse tunicatis, 75-80 \approx 16-18, aparaphysatis, octosporis; sporidiis obovato-didymis, distichis, medio 1-septato-constrictis, loculo supero subgloboso, infero conoideo nonnihil minore, hyalinis, 16-20 \approx 9-10.

Hab. ad caules aridos putrescentes *Fœniculi* piperiti circa Santa Catalina, Buenos Aires Rep. Argentina, Amer. austr.

38. *Sphærella Bupleuri* Rota-Rossi, III Contr. Mic. Bergamo, Atti 3746 R. Ist. bot. Pavia ser. II, v. XIII p. 207 (extr. 1907). — Peritheciis gregariis, erumpentibus, globosis, atris, 135-200 μ . diam.; mycelio fusco, septato; ascis ovoideo-ellipsoideis, basi ventricosis, octosporis 50-70 \approx 20-22; sporidiis polystichis, oblongo-clavulatis, medio 1-septatis et constrictis, 4-guttulatis, hyalinis, 18-22 \approx 5-7.

Hab. in foliis siccis *Bupleuri* graminifolii, Pizzo Arera Bergamo Italiæ bor. (G. B. TRAVERSO).

39. *Sphærella Ægopodii* (A. Pot.) Sacc. et Trav. - Syll. XX, p. 817. - 3747
Mycosphærella Ægopodii Pot., Ann. Myc. 1910, p. 49, f. 1 et f. 5:1. — Peritheciis subsuperficialibus; ascis fasciculatis, 50-60 \approx 14, nonnullis apicem versus angustatis et tunc longioribus; sporidiis medio septatis, non constrictis, 18-19 \approx 5, loculo inf. paullo angustiori (4 μ .).

Hab. in foliis hibernatis *Ægopodii* *Podagrariæ* a *Sep-toria Podagrariæ* invasis, prov. Kursk Rossia. — *Phyllachora Podagrariæ* Lasch forte eadem species est. — Sec. Potebnia ut

pycnidia verisimiliter spectant: *Septoria Podagraricæ* et *Phyllosticta Agopodii*.

40. **Sphærella Ferulæ** L. Maffei in Atti dell' Ist. botanico di Pavia, 3748 ser. II, vol. XI, p. 30 (extr. 1905) t. XXI, fig. 1-5 (ex err. sub nom. *Sph. caulicolæ*), et v. XIII, Micol. Ligustica, Extr. p. 5. — Peritheciis dense gregariis, globosis, primum epidermide tectis, demum ostiolo fere papillato pertusis; ascis cylindrico-clavatis, 160-180 \times 21-25, aparaphysatis, octosporis; sporidiis monostichis, cylindraceo-ellipsoideis, obtusis v. acutiusculis 1-septatis, ad septum leniter constrictis, loculis inæqualibus, hyalinis, guttulatis, granulosis, 19-28 \times 6-9.

Hab. in caulibus siccis *Ferulæ communis* in insula Gallinara Liguriæ, Ital bor.

41. **Sphærella Cryptotæniæ** P. Henn., Engl. Jahrb. XXXVII (1905) 3749 p. 161. — Maculis sparsis, rotundatis, albidis, zona fusco-brunnea cinctis; peritheciis epiphyllis, minutissimis, atris, subhemisphæricis, pertusis, 60-70 μ . diam.; contextu atro-membranaceo; ascis fasciculatis, aparaphysatis, oblongo-ovoideis v. clavatis, obtusis, octosporis, 25-32 \times 8-11; sporidiis distichis v. subtristichis, oblongis v. fusoides, obtusis, medio 1-septatis, hyalinis, 9-11 \times 3.

Hab. in foliis *Cryptotæniæ japonicæ*, Wakayama Japoniæ (H. NAKASHIKI).

42. **Sphærella Escalloniæ** Spegazz., An. Mus. Nac. Buenos Aires 3750 t. XIX (1909) pag. 351. — Maculis orbicularibus, 1-5 mm. diam., superne albescentibus fusco-marginatis; peritheciis gregariis erumpentibus, sæpius epiphyllis e conoideo lenticularibus 100-120 μ . diam., atris, glabris membranaceis; ascis lanceolatis sessilibus, 50-60 \times 14, octosporis; sporidiis di-tristichis rectis hyalinis, 16-18 \times 3-4, loculis æquilongis, minute biguttuatis.

Hab. ad folia viva *Escalloniæ roseæ* in dumetis prope Nahuel-huapi, Rep. Argentina, Amer. austr.

43. **Sphærella Audibertiæ** Rehm, Ann. Mycol. VII (1909) p. 533. — 3751 Peritheciis caulem cinerascens late obtegentibus, gregariis, primitus sub epidermide nidulantibus, dein erumpentibus, globulosis, haud papillatis, nigris, glabris, c. 120 μ . diam.; ascis clavatis, obtusis 35 (an 85?) \times 15-18, 8-sporis; sporidiis oblongis, utrinque obtusis, medio septatis, vix constrictis, utraque cellula biguttulata, hyalinis, 18 \times 6; paraphysibus nullis.

Hab. ad caules *Audibertiæ polystachyæ*, Mounts prope Claremont California, Amer. bor. (C. F. BAKER).

44. **Sphærella Salviæ** Strasser, Verh. zool.-bot. Ges. Wien Bd. LVII 3752 (1907) p. 311. — Peritheciis amphigenis, late sparsis, subsuperficialibus, globosis, membranaceis, atro-brunneis, 40-60 μ . diam.; ostiolo impresso denique pertuso; contextu pseudoparenchymatico; ascis tereti-oblongis, 40 \times 7-8; sporidiis fusoides-clavulatis; bicellularibus, 10-12 \times 3-4, medio valde constrictis, loculo super. crassiore et brevior, infer. angustior.

Hab. in foliis siccis Salviæ glutinosæ ad Sonntagberg Austriæ. — *Sphærellæ Carlincæ* proxima.

45. **Sphærella Lysimachiæ** v. Höhn. in Strasser, III Nacht. Pilz. 3753 Sonntagberges in Verhandl. zool. bot. Gesell. Wien, 1905, p. 605. — Peritheciis nigris nitidulis, crebro gregariis v. sparsis, globosis, prominentibus, 100 μ . diam.; ascis aparaphysatis, crasse clavatis, paucis, 30 \times 8; sporidiis octonis, bicellularibus, 2-3-stichis, 8-14 \times 3-4 (raro 16 \times 4,5) utrinque obtusule tenuatis, medio leviter constrictis; cellula sup. crassior.

Hab. in foliis siccis Lysimachiæ vulgaris ad Sonntagberg-Austriæ. (STRASSER).

46. **Sphærella midzurensis** (Bub.) Sacc. et Trott., *Mycosphærella midzurensis* Bubák et Ranojevic, Ann. Mycol. VIII (1910) p. 360. — Peritheciis sparsis, subepidermicis, dein erumpentibus, globosis, ostiolo papilliformi præditis, membranaceis, 200 μ . circ. diam., contextu obscure brunneo; ascis elongatis v. ovoideo-elongatis, basi in pedicellum longum crassum attenuatis, supra rotundatis, quandoque etiam angustatis, tunica crassa subgetatinosa præditis, 60-75 \times 19-22; sporidiis plerumque ad basim asci congregatis (6), cæteris duobus supra v. regulariter inasco distributis, 19-22 \times 5-6, elongatis v. fusoides, utrinque plerumque attenuatis, ibique rotundatis, pariete transversa præditis, non constrictis, hyalinis.

Hab. in caulibus siccis, foliis petiolisque Androsaces carneæ, M. Midzur, alt. 2168 m., Serbia.

47. **Sphærella Areticæ** (v. Höhn.) Sacc. et Trott., *Mycosphærella Areticæ* v. Höhn. in Fragm. Mykol., III, Sitzb. K. Akad. d. Wissensch. Wien Bd. CXVI Abt. I (1907) p. 110. — Peritheciis sparsis v. 2-3 approximatis, sæpius epiphyllis, globosis, indistincte papillatis, subcutaneis, demum semiemergentibus, nigris, nitidulis, 100-140 μ . diam.; contextu ex 4-5 stratis cellularibus atro-brunneis formato; ascis aparaphysatis, crassiuscule tunicatis, clavatis, brevissime noduloso-stipitatis, octosporis, 48-60 \times 9-10; sporidiis distichis, ob-

longo-clavulatis, utrinque obtusulis, 14-19 \approx 4-5, ad septum medium non constrictis, cellula superiore leniter crassiore.

Hab. in imis foliis morientibus Aretiae alpinæ ad Gurgl-Vent Tiroliae (Dr. GINZBERGER).

48. **Sphærella Ludwigiana** Sacc. et Har. in Sacc., Not. myc. VIII, 3756
Ann. Myc. v. IV (1906) pag. 490, tal. X, fig. 1. — Peritheciis laxè gregariis, perexiguis, punctiformibus, epidermide vix tumidula velatis, atris, depresso globosis 60-80 μ . diam., glabris, apice poro impresso, 8 μ . diam. pertusis; contextu minute parenchymatico fuligineo, circa ostiolum saturatiore; ascis subglobosis v. globoso-ellipsoideis, utrinque rotundatis, subsessilibus, 15 μ . diam. v. 18-20 \approx 13-14, octosporis, aparaphysatis; sporidiis 3-4-sticho-conglobatis, oblongis, utrinque rotundatis, medio 1-septatis, non vel vix constrictis, 10-12 \approx 3, hyalinis.

Hab. in caulibus emortuis Globulariæ vulgaris, Lard. Galliae, 1906 (LUDWIG, comm. P. HARIOT). — Affinis *Sphærellæ Ariadnæ* et *Sph. minori* quæ tamen satis diversæ.

49. **Sphærella Columbi** (Rehm) Sacc. et Trott., *Mycosphærella Columbi* Rehm, Ann. Mycolog. VI (1908) pag. 120; Ascom. Exsicc. fasc. 41, n. 1764. — Maculis orbicularibus, fuscis, concentricè zonatis, 5 mm. diam., epiphyllis, minus distincte hypophyllis; peritheciis gregariis, innatis, erumpentibus, globulosis, atris, glabris, 70-90 μ . diam., poro pertusis, basi hyphis fuscidulis, 4-5 μ . cr. in contextum parenchymaticum peritheciolorum abeuntibus obsessis; ascis obovatis, 25-27 \approx 12, octosporis; sporidiis clavulatis, utrinque obtusis, medio subconstricto-septatis, grosse 4-guttatis, hyalinis, 12-14 \approx 4-4,5 distichis; paraphysibus nullis.

Hab. ad folia viva Plantaginis Rugelii, Columbus, Ohio Amer. bor. — A ceteris speciebus plantaginicolis satis distincta.

50. **Sphærella perexigua** Starb., Ascom. Schwed. Chaco-Cordill. Exp., 3758
Arkiv. f. Bot. Bd. V (1905) pag. 21, fig. 16. — Peritheciis numerosissimis, caules totos nebulosim ambientibus, sparsim gregariis, interdum confertis, immersis vix prominulis globuloso-lenticularibus, poro minuto pertusis, contextu membranaceo, cellulis pro ratione magnis, polyedricis composito, nigricantibus, minutissimis, 75-100 μ . diam.; ascis octosporis, late obclavatis, sursum detruncato-obtusis, late sessilibus, 30-33 \approx 7,5-9; sporidiis conglobatis vel superioribus distichis, primo intra ascos quadriguttulatis deinde medio septatis, clavulatis, hyalinis, 12,5-13 \approx 3,5 μ .; paraphysibus nullis.

Hab. in caulibus *Compositarum* speciei, Tarija Boliviae. — *M. alienæ* Passer. affinis videtur, sed forma ascorum sporidiorumque differt; cfr. etiam *M. ambigua* Fautr. et Lamb.

51. **Sphærella Bakeri** (Rehm) Sacc. et Trott., *Mycosphærella Bakeri* 3759

Rehm, Ann. Mycol. VII (1909) p. 533. — Peritheciis gregariis, conoideis, minutissime papillulatis, atris, glabris, primitus innatis, dein prominentibus, c. 200 μ . diam.; ascis piriformibus, lata basi sessilibus, 8-sporis, 50 \approx 18; sporidiis oblongis, subconoideis, utrinque subacutatis, medio paullulum constrictis, utraque cellula apice guttulata, hyalinis, 18 \approx 6; paraphysibus nullis.

Hab. ad caules *Gnaphalii* emortuos, Mounts prope Claremont Californiæ (C. F. BAKER).

52. **Sphærella Serratulæ** Hollós, Ann. Mus. Nat. Hung. VI (1908) 3760

VI, p. 528. — Peritheciis epidermide velatis, gregariis, globulosis, nigris, 100-120 μ . diam., poro pertusis, contextu parenchymatico; ascis clavatis, estipitatis, 6-8 sporis, 30-35 \approx 8-10, aparaphysatis, sporidiis inordinate distichis, oblongis, utrinque leviter attenuatis et rotundatis, medio septatis, vix constrictis, hyalinis, 12-14 \approx 3,5-4, loculo superiore plerumque paullo crassiore.

Hab. in caulibus siccis *Serratulæ tinctoriæ*, prope Keskemét Hungariæ.

53. **Sphærella Aronici** (Volkart) Sacc. et Trav., *Mycosphærella Aro-* 3761

nici Volk. in Ber. deut. bot. Gesell. XXI, pag. 480, tab. 25, fig. 4-6 (1903), *Sphærella? Aronici* Fuck. — Syll. I, pag. 538 [status metagenetici, non st. ascophorus]. — Peritheciis in maculis amphigenis variæ magnitudinis, viridi-atris, subvelutinis insidentibus, plerumque epiphyllis, immersis, globosis, atris, 140-160 μ . diam., poro circulari pertusis, excipulo crasso pseudoparenchymatico; ascis clavatis v. ellipsoideo-ventricosis, subsessilibus, paucis, 50-80 \approx 25-40; sporidiis subtristichis, ellipsoideo-cylindraceutis v. subovoideis, utrinque obtusis, prope medium septatis, non constrictis, eguttulatis, loculo superiore interdum crassiusculo, hyalinis vel dilutissime luteolis, 30-40 \approx 9-10. Status conidicus: *Fusicladium Aronici* (Fuck.) Sacc. — Syll. IV, p. 347; st. pycnidicus: *Phyllosticta Aronici* (Fuck.) Sacc. — Syll. III, p. 45.

Hab. in foliis languidis *Doronicorum*, præcipue *Doronici* (Aronici) scorpioidis et *Clusii* in Germania, Austria, Helvetia, Italia.

54. **Sphærella mutisiicola** Spegazz., Fungi Paul., Rev. Mus. La Plata 3762

t. XV (1908) p. 20. — Maculis epiphyllis sparsis repandis, 2-10 mm.,

cinerescentibus subcallosis subdefinitis; peritheciis centro macularum solitariis v. pauci-gregariis erumpentibus lenticularibus, 80-90, μ . diam., minute ostiolatis, glaberrimis, coriaccellis, atris, contextu minute denseque parenchymatico subindistincto, atro-fuligineo; ascis aparaphysatis, antice obtuse rotundatis crasseque tunicatis, postice rotundato-cuneatis, minute stipitatis 50-60 \times 10-14, octosporis; sporidiis oblique distichis v. polystichis, clavulatis, rectis v. leniter curvulis, parum supra medium septatis, loculo supero elliptico ovato, infero, cylindrico-conoideo, acutiore, 18-20 \times 4, hyalinis.

Hab. ad folia languida Mutisiæ sp. cuiusdam prope Sao Paulo, Brasilia (USTERI).

55. **Sphærella Balsamorhizæ** (Earle) Sacc. et Trott., *Mycosphærella* 3763
Balsamorhizæ Earle, Bull. of the New York Bot. Gard. (1904) p. 292. — Peritheciis per latas areas densiuscule sparsis innatis, nigris lenticularibus, non collapsis, 200-225 μ . diam., contextu laxiuscule celluloso, cellulis 10-12 μ . diam., ostiolo minuto, perforato; ascis anguste ellipsoideis, breviter stipitatis, 60-70 \times 14, aparaphysatis; sporidiis distichis anguste ovoideis, inæqualiter 1-septatis, leviter constrictis, 18-20 \times 7-8.

Hab. in caulibus emortuis *Balsamorhizæ* sp., King' Canon, pr. Carson Nevada Amer. bor. (C. F. BAKER).

56. **Sphærella Perezii** Speg., An. Mus. Nac. Buenos Aires t. XIX 3764
 (1909) p. 354. — Maculis nullis, matrice arescente fragili sordide cinerescente; peritheciis laxè gregariis coriaccellis, parenchymate innatis, epidermide tectis adnatisque sæpius epiphyllis lenticulari-hemisphaericis, 100-120 μ . diam., minute umbilicato-ostiolatis; ascis, subcylindræis apice crasse tunicatis, aparaphysatis octosporis, 55-65 \times 10-12; sporidiis elliptico-didymis, medio modice 1-septato-constrictulis, 14-15 \times 5, hyalinis.

Hab. ad folia arida putrescentia *Perezii* patagonicæ in aridis secus Rio Santa Cruz Rep. Argent. Amer. austr.

57. **Sphærella Proustii** Speg., An. Mus. Nac. Buenos Aires t. XIX 3765
 (1909) p. 353 cum icon. — Maculis nullis sed matrice tota cinerescenti-arescente; peritheciis parenchymate innatis confertis, udis subhemisphaericis 100-120 μ . diam., siccis minute ostiolato-perforatis, membranaceis; ascis subclavatis 60-70 \times 11-12, octosporis aparaphysatis; sporidiis subacicularibus subcurvulis, 1-septatis ad septum non constrictis, 32-38 \times 3-4, hyalinis.

Hab. vulgata ad folia dejecta arida *Proustii* ilicifoliæ in

præandinis Cacheuta, prope Mendoza Rep. Argentina Amer. austr.
— An potius *Ophiosphærellæ* species?

58. *Sphærella leptosperma* Speg., Fungi Chilenses (1910) p. 55. — 3766

Maculis nullis; peritheciis epiphyllis erumpenti-subsuperficialibus sparsis v. laxe gregariis, nigris, glabris, subhemisphæricis, coriaccellis, ostiolo minuto perforatis, 90-100 μ . diam.; ascis subellipsoideis breviter cuneato-pedicellatis, 35-38 \times 10; sporidiis conglobatis cylindraceo-fusoideis, hyalinis, medio 1-septatis, non constrictis, 18-20 \times 3.

Hab. in foliis dejectis subputrescentibus *Proustia* pirifoliae, Cerro Caracol de Concepcion, Chile Amer. austr. — *Sphær.* *Proustia* Speg. affinis sed differt ascis sporidiisque minoribus.

59. *Sphærella Fraxini* Niessl in Linhart, Fungi hungar. n. 162 (1883); 3767

Winter, Pilze, II, pag. 385. — Peritheciis hypophyllis, nigris, caespitosus vel dense confertis, maculas griseas effusas formantibus, minutis, globosis, ostiolo punctiformi; ascis clavato-oblongis, subsessilibus, octosporis, 55-70 \times 10-13; sporidiis confertis, lanceolato-fusiformibus, rectis vel curvatis, utrinque obtusis, uniseptatis et parum constrictis, subhyalinis, 26-28 \times 4.

Hab. in foliis dejectis *Fraxini* excelsioris, Markt-Au prope Ung.-Altenburg (LINHART) et Riva Valsesia (CARESTIA).

60. *Sphærella Tupæ* Speg., Fungi Chilenses (1910) p. 58. — Macu- 3768

lis nullis; peritheciis sparsis v. laxe gregariis minute erumpentibus, pusillis, atris glabris, ostiolo minute perforatis, 80-90 μ . diam.; ascis obclavulatis subsessilibus, 35-40 \times 8, apophysatis; sporidiis distichis, hyalinis, clavulatis, parvis, 1-septato-constrictulis, 9-10 \times 2,5.

Hab. in ramis emortuis *Lobelia* salicifoliae, Cerro Alegre de Valparaiso Chile Amer. austr.

61. *Sphærella Pantacanthæ* Spegazz., An. Mus. Nac. Buenos Aires 3769

t. XIX (1909) p. 354. — Foliis infectis totis sordide fusco-cinereiscentibus aridis fragilibus; peritheciis lenticularibus 70-90 μ . diam. parenchymate innatis, epidermide tectis, ostiolo lato pertusis; ascis e cylindraceo subclavulatis, apophysatis octosporis 40-50 \times 6-7; sporidiis e cylindraceo fusoideis distichis, 1-septatis non constrictis, 10-12 \times 2-2,5, loculis æquilongis, infero sæpius acutiore, rectis, hyalinis.

Hab. frequens ad folia arida *Pantacanthæ* Ameghinoi in aridis Chubut, Patagonia, Amer. austr.

62. *Sphærella Tabaci* Maubl., Bull. Soc. Myc. Fr. XXIII (1907) 3770

p. 142 t. XX f. 8-10. — Peritheciis conoideo-globosis, basi applanatis, ostiolo prominulo præditis, 125-150 \times 100-120; ascis cylindricis, apice rotundatis, basi breviter pedicellatis, octosporis, aparaphysatis, 50-67 \times 10-13,5; sporidiis oblique monostichis, ovoideis, 1-septatis, ad septum leniter constrictis, primum hyalinis demum dilutissime griseis, 14-16,5 \times 6,5-7,5, loculo sup. latiore.

Hab. in caulibus *Nicotianæ Tabaci*, Razac, Dordogne Galliæ. — Affinis *Sph. Nicotianæ*.

63. *Sphærella Asperifolii* B. R. S. in Saccardo, Not. Myc. VI, Ann. 3771 Myc. v. VI (1905) p. 508. — Peritheciis globulosis, epiphyllis, innato-prominulis, nigris, minutissimis, dense approximatis, levibus, 50-75 μ . diam., poro latiusculo pertusis; ascis clavato-oblongis, sessilibus, rosulatis, aparaphysatis, 28-30 \times 5-6; sporidiis distichis, fusioideis, curvulis, medio 1-septatis, non v. vix constrictis, utrinque acutiusculis, 8-9 \times 2-2,5 hyalinis.

Hab. in foliis emortuis *Cynoglossi*, La Panne pr. Furnes Belgii (M. ROUSSEAU). — Forte initio in foliis nondum emortuis maculas generat.

64. *Sphærella viburnicola* Speg., An. Mus. Nac. Buenos Aires t. XIX, 3772 (1909) p. 356. — Maculis nullis sed matrice tota arescente atque sordide cinerescente; peritheciis hinc inde 5-30 gregariis sed non constipatis, prominulis sed epidermide velatis, e lenticulari conoideis, 80-100 μ . diam., ostiolo minutissimo umbilicato perforatis, glabris, atris, membranaceis; ascis cylindraceis, aparaphysatis, octosporis, 40-45 \times 7-8; sporidiis subelavulato-didymis, distichis, 1-septatis, hyalinis loculis subæquilongis, 10-2,5-3.

Hab. ad folia dejecta putrescentia *Viburni Tini* in hortis Santa Catalina, Argentina Amer. austr. — A *Sphær. Lantanæ* (Nits.) Auersw. ascis cylindraceis sporisque crassioribus distincta videtur.

65. *Sphærella Weigeliæ* (Fairm.) Sacc. et Trott., *Mycospharellæ* Fairm. 3773 Ann. mycol. (1910) p. 326. — Peritheciis minutis, gregariis, atris, hypophyllis; ascis cylindraceis, apice rotundatis, breve stipitatis (8-sporis?); sporidiis subdistichis, oblongo-fusiformibus, primo 2-guttulatis, dein uniseptatis, hyalinis, 10-13 \times 2-3.

Hab. ad folia dejecta *Weigeliæ roseæ* cultæ Lyndonville N. Y. Amer. bor.

66. *Sphærella Molluginis* Rehm, Ann. Mycol. VII (1909) pag. 527, 3774 Ascom. exsicc., fasc. 45, n. 1861. — Peritheciis dispersis, rarius gregariis, innatis, globoso-conoideis, glabris membranaceo-contextis,

0,15 mm. diam., nigris, papillula minutissima demum per peridermium haud maculatum prominente; ascis subcylindræis, brevissime stipitatis, $65 \approx 10$, 8-sporis; sporidiis fusiformibus utrinque acutatis, medio septatis et subconstrictis, utrinque cellula biguttata, hyalinis, $12-18 \approx 4-5$, distichis; paraphysibus nullis.

Hab. ad caules siccos Galii Molluginis, Hinterstein Alpinum Algoviae (Dr. REHM).

67. *Sphærella ricinicola* Speg., An. Mus. Nac. Buenos Aires t. XIX 3775 (1909) p. 355. — Peritheciis parvulis lenticulari-convexulis 90-120 μ . diam., subepidermicis, hinc inde confertiusculis, tenui-membranaceis, ostiolo latiusculo umbilicato perforatis; ascis obclavatulis 50 \approx 8-10, aparaphysatis octosporis; sporidiis e fusoides suclavulatis e disticho conglobatis, rectis, loculis subæquilongis, biguttulatis, hyalinis, $15 \approx 5$.

Hab. ad ramos aridos dejectos subputrescentes Ricini communis, La Plata, Argentina Amer. austr.

68. *Sphærella pachythecia* Speg., Fungi Chilenses (1910) p. 56. — 3776 Maculis amphigenis, orbicularibus determinatis, ad hypophyllum fuscis ad epiphyllum arescenti-cinereis, areola denticulata atro-fusca cinctis; peritheciis epiphyllis, centro cinereo macularum sub epidermide gregariis, pusillis, hemisphæricis, nigris, glabris, membranaceo-perenchymaticis, ostiolo minuto perforatis, 75-100 μ . diam.; ascis ovatis v. obovatis brevissime crasseque pedicellatis, 25-30 \approx 9-10; sporidiis oblanceolatis, parvis, hyalinis, 1-septatis, non constrictis.

Hab. in foliis languidis v. siccis Cryptocaryæ Peumus, Cerro Caracol de Concepción, Chile Amer. austr.

69. *Sphærella chenopodiicola* Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 351. — 3777 Maculis nullis vel parum manifestis; peritheciis pusillis lenticularibus laxè gregariis udis hemisphæricis 75-90 μ . diam., nigris, glabris membranaceis, ostiolo majusculo umbilicato perforatis; ascis subclavulatis breviter cuneato-pedicellatis, octosporis, aparaphysatis, 40-45 \approx 8-10; sporidiis ellipsoideo-didymis septo constrictulis, loculis æquilongis minute biguttulatis hyalinis, $11-13 \approx 3-3,5$.

Hab. ad caules aridos putrescentes Chenopodii hircini Ensenada, prope La Plata, Argentina America austr.

70. *Sphærella Woronowii* (Jacz.) Sacc. et Trott., *Mycosphærella Woronowii* Jacz. in Woronow, Contrib. ad Mycofloram Caucasi, Tiflis (1910) pag. 143. — 3778 Maculis rotundatis v. angulatis, ochraceis, fu-

sco-cinctis; peritheciis minutis nigris, prominentibus, epiphyllis, ostiolo minuto conico; ascis clavatis 60-80-100 \approx 12; paraphysibus nullis; sporidiis hyalinis, bicellularibus, curvatis v. rectis, constrictis, 17-20 \approx 4-6.

Hab. in foliis languescentibus Juglandis regiæ in Abchazia, Caucasus (G. WORONOW).

71. **Sphærella Ficus** Trav. et Spessa, Bol. Soc. Broter. vol. XXV 3779 (1910) pag. 170, t. I, f. 2. — Peritheciis hypophyllis, hinc inde dense gregariis, per epidermidem erumpentibus, sphaeroideis, atris 70-90 μ . diam., poro angusto præditis; contextu subcarbonaceo, fuligineo-atro; ascis clavato-fusoideis vel subcylindræis, apapophysatis, octosporis, 45-50 \approx 6-8; sporidiis subdistichis, fusoideis, utrinque acutiusculis, medio septatis et ad septum non constrictis, 10-12 \approx 2 $\frac{1}{2}$ -3, hyalinis.

Hab. in pagina inferiore foliorum Ficus macrophyllæ in Horto botanico conimbricensi (A. MOLLER). — A *Sph. sycophila* Wint. peritheciis gregariis et fere maculas efformantibus, ascis multo majoribus et sporidiis typice subdistichis, rectis, acutiusculis differt.

72. **Sphærella Elasticæ** (Koord.) Sacc. et Trav. — Syll. XX, p. 820, 3780 *Mycosphærella Elasticæ* Koord., Botan. Untersuch. (1907) p. 189, fig. 16, II. — Maculis nullis; peritheciis innatis, crustaceis, glabris, nigris, globosis, gregariis, 50 60 μ . diam., amphigenis, ostiolo papilliformi erumpente; ascis cylindræis, fasciculatis, 40-45 \approx 4-4,5, apice obtusis; sporidiis hyalinis, clavato-cylindræis, basi angustatis, apice truncatis, basi obtusis, medio 1-septatis, 7-9 \approx 2-2,5 subdistichis.

Hab. in foliis putrescentibus Fici elasticæ prope Loano, Purworedio etc. prov. Kedu ins. Java (KOORDERS).

73. **Sphærella Nothofagi** Speg. An. Mus. Nac. Buenos Aires, t. XIX 3781 (1909) p. 352. — Maculis nullis vel quandoque matrice tota are-scenti-albicante; peritheciis sæpius 20-30 laxissime aggregatis, primo epidermide tectis dein plus minusve exertis, udis subhemisphaericis 90-110 μ . diam., siccis cupulato-collapsis, ostiolo vix papillato perforatis; ascis obclavatulis, 30 \approx 8, apapophysatis, octosporis; sporidiis subdistichis utrinque obtusiusculis, cylindræo-ellipsoideis, non v. vix constrictis, 8-10 \approx 2,5-3, loculis æquilongis, minute biguttulatis hyalinis.

Hab. ad folia emortua Nothofagi obliquæ et N. pro-

ceræ prope lago Nahuel-huapi, Argentina America austr. — *A. S. antarctica* Speg. toto cælo diversa.

74. *Sphærella salicicola* (Fr.) Fuck. — Syll. I, p. 487 — f. *Amygdalinæ* Jaap in Abhandl. Bot. Ver. Brandenb. XLVII (1905) p. 85. — Peritheciis gregariis, hypophyllis, globoso-lenticularibus, nigris, 100 μ . diam., ostiolo 15 μ . diam.; ascis tereti-clavatis, 38 \times 5,5, octosporis; sporidiis ovato-oblongis, 9-11 \times 3, bicellularibus, vix constrictis, distichis.

Hab. in foliis *Salicis amygdalinæ*, Prignitz Borussiæ — Status conidicus videtur *Ramularia rosea* (Fuck.) Sacc.

75. *Sphærella baldensis* C. Mass. ap. Sacc. in Ann. Mycolog. 1911, p. 250. — Peritheciis tenui-carbonaceis, erumpentibus, globulosis, hypophyllis, 70-80 μ . diam., in maculis vix distinctis suborbicularibus 1 mm. latis dense confertis, rarius subsparsis; ascis clavulatis breviter stipitatis, 25-32 \times 5-6; sporidiis oblongis, 1-septatis, hyalinis, 5-6 \times 2-2,5.

Hab. in foliis languidis *Salicis arbusculæ* in M. Baldo loco «Telegrafo» dicto. Legit doct. A. Forti. — *Sphærellæ salicicolæ* Fuck. proxima.

76. *Sphærella grandispora* (Bub.) Sacc. et Trav. - Syll. XX p. 822, *Mycosphærella grandispora* Bub. in Handel-Mazzetti Bot., Reis. Pont. Randgeb. in Ann. Naturhist.-Hofmus. Wien, XXIII (1909) p. 103, t. V, fig. 2 a-e. — Peritheciis sparsis v. hinc inde gregariis, subepidermicis, globosis, dein superiore parte conica erumpentibus, atris, 45-60 μ . diam., crasse tunicatis, contextu dense parenchymatico, castaneo-brunneo; ascis tantum 3-4 in perithecio evolutis, ovoideis v. ellipsoideis, 33-44 \times 22-29, apice valde incrassatis, octosporis; sporidiis cylindraceis 22-26 \times 6,5, rectis v. curvatis, in medio septatis, ibidem constrictis, utrinque attenuato-rotundatis hyalinis.

Hab. ad folia *Nartheicii Balansæ*, in montibus ponticis Anatoliæ.

77. *Sphærella Puyæ* Speg., Fungi Chilenses (1910) p. 57, cum icon. — Maculis nullis; peritheciis amphigenis, epidermide tectis, subseriatis pusillis atris, glabris, tenui-membranaceis, laxe parenchymaticis, 50-75 μ . diam., ostiolo latiusculo, usque ad 10 μ ., perforatis; ascis paucis ovatis v. obovatis brevissime crasseque pedicellatis, 20-25 \times 6-10; sporidiis subconglobatis e fusoides subclavulatis, 1-septatis non v. vix constrictis, 10-12 \times 2,5-3.

Hab. in foliis emortuis putrescentibus Puyæ chilensis, Cerro Alegre de Valparaiso, Chile Amer. Austr.

78. **Sphærella montenegrina** Bubák, Bull. Herb. Boiss. 2 sér. VI (1906) 3786 p. 400. — Peritheciis in areis foliorum atratis insertis, plerumque ad apices, sparsis v. gregariis, nigris, globosis, 90-140 μ . diam., tectis dein papilla conica brevi erumpentibus, demum depresso ampulliformibus, contextu atro crassiuscule parenchymatico; ascis ovoideo-clavatis, basi abrupte in stipitem brevem productis, apice incrassatis, 50-66 \times 16-22, octosporis; sporidiis inordinatis, oblongo-ellipsoideis, 17-22 \times 4,5-6, bicellularibus, hyalinis, utrinque obtusule tenuatis.

Hab. in foliis emortuis Asphodelinæ luteæ pr. Koscielo Montenegro.

79. **Sphærella Smilacis** Speg., An. Mus. Nac. Buenos Aires t. XIX 3787 (1909) p. 355. — Maculis sæpius marginalibus elongato-repandulis determinatis anguste subviolaceo-marginatis; peritheciis innatis epidermide velatis lenticularibus 90-110, sæpius epiphyllis, minute ostiolato-impressis, coriacellularis; ascis subcylindraceis, aparaphysatis octosporis, 45-50 \times 10; sporidiis distichis medio septatis constrictulis, loculis subæqualibus, minute biguttulatis hyalinis, 18 \times 6.

Hab. ad folia languida Smilacis campestris in silvis secus Rio San Francisco, Jujuy Rep. Argentina Amer. austr.

80. **Sphærella Lapageriæ** Speg., Fungi Chilenses (1910) pag. 54. — 3788 Maculis nullis; peritheciis innato-erumpentibus laxè gregariis subglobosis, minutis coriacellularis, 75-100 μ . diam., ostiolo impresso perforatis; ascis subcylindraceis deorsum cuneatis breviter noduloseque pedicellatis, 50 \times 10, aparaphysatis; sporidiis e cylindraceo subfusoides mediocribus sæpius leniter inæquilateralibus, ad septum medium non constrictis, 15-20 \times 3.

Hab. in foliis siccis Lapageriæ roseæ, Cerro Caracol de Concepcion Chile Amer. austr.

81. **Sphærella Alstrœmeriæ** Speg., Fungi Chilenses (1910) pag. 52, 3789 (cum icon. p. 200). — Maculis fuscescentibus ellipticis indeterminatis; peritheciis laxè gregariis, lenticularibus minutis epidermide tectis membranaceis, 100-120 μ . diam.; ascis ovatis apice crasse tunicatis basi rotundatis sessilibus v. subsessilibus, 30-35 \times 16-20; sporidiis conglobatis, subcylindraceis, parvis, loculis æquilongis biguttulatis, 14-15 \times 4-5.

Hab. in pedunculis floralibus siccis Alstrœmeriæ sp., Cerro Alegre de Valparaiso Amer. austr.

82. **Sphærella Wagneræ** (Earle) Sacc. et Trott., *Mycosphaerella Wagneræ* Earle, Bull. of the New York Bot. Gard. (1904) p. 292. 3790
 — Peritheciis per areas latas dealbatas densiuscule sparsis, minutis, nigris, prominulis, non collabentibus, 100-150 μ . diam., ostiolo inconspicuo; ascis ellipsoideis v. sæpius irregulariter fusoides, 60-70 \times 20, paraphysatis; sporidiis inordinatis, ellipsoideis, utrinque obtusis, 1-septatis, 16-18 \times 6-7, hyalinis.

Hab. in caule emortuo *Wagneræ* sp. King' Canon pr. Carson, Nevada Amer. bor. (C. F. BAKER).

83. **Sphærella Galtoniæ** Hollós, Ann. Mus. Nat. Hung. VI (1908) p. 528. 3791
 — Peritheciis subcutaneo-erumpentibus, dense gregariis, globulosis, nigris, 100-120 μ . diam., ostiolo punctiformi, contextu parenchymatico; ascis clavatis, estipitatis, 6-8-sporis, 50-70 \times 20-22; sporidiis inordinate distichis, oblongis, utrinque rotundatis, medio 1-septatis, leniter constrictis, granulosis, hyalinis, 20-28 \times 7-8, loculo superiore plerumque paullo crassiore.

Hab. in caulibus siccis *Galtoniæ* candicantis cultæ in horto, Kecskemét Hungariæ.

84. **Sphærella Muscari** Hollós, Ann. Mus. Nat. Hungar. VIII (1910) p. 9. 3792
 — Peritheciis epidermide velatis, dense gregariis, globulosis nigris, 80-100 μ . diam., poro pertusis, contextu celluloso; ascis clavatis, astipitatis, 6-8-sporis, 50-54 \times 16-18, paraphysatis; sporidiis inordinate distichis, oblongis, utrinque rotundatis, medio 1-septatis, vix constrictis, hyalinis, 16-20 \times 5,5-6, loculo superiore paullo crassiore.

Hab. in caulibus siccis *Muscari* comosi prope Kecskemét Hungariæ.

85. **Sphærella Burnati** (Cruchet) Sacc. et Trav. - Syll. XX, p. 818 - 3793
Mycosphaerella Burnati Cruchet in Bull. Soc. Vaud. Scienc. Nat. XLIV (1909) p. 473 c. fig. — Peritheciis amphigenis, epidermide decolorata grisea tectis, dense gregariis, globosis, ostiolo conico prominente apertis, 200 μ . et ultra diam.; ascis oblongis, basi latioribus, apice subattenuatis obtusisque, 65-80 \times 22-24, pedicello brevi præditis; paraphysibus nullis; sporidiis 8, subdistichis, oblongis, utrinque obtusis, uniseptatis, ad septum leniter constrictis, hyalinis, in quoque loculo guttulatis, loculo superiore plerumque breviori et latiori, 27-33 \times 8-10.

Hab. in foliis languidis vel emortuis *Lloydie* serotinæ, in Alpihus Valesiacis Helvetiæ. — Socium adest *Asteroma Lloydie* Cruch.

86. **Sphærella Iridis** Awd. - Syll. I, pag. 524. - Sec. Cl. Sydow, in 3794
 Mycoth. germ. fasc. XIV-XV, n. 677 (1908), et Ann. Myc. VI
 (1908) p. 479 species sic describenda: — Maculis amphigenis, ob-
 longis, 28 mm. longis, griseolis; peritheciis amphigenis, gregariis,
 immersis, epidermide primo tectis, globosis vel depresso-globosis,
 atris, membranaceis, 60-110 μ . diam., poro minuto pertusis; ascis
 late ellipsoideis v. saccatis, apice plerumque rotundatis, basi sæ-
 pius attenuatis, subsessilibus, 35-45 \times 17-20, octosporis; sporidiis
 substrictis, oblongis, utrinque rotundatis, circa medium septatis
 et plus minusve constrictis, 15-18 \times 4-6, hyalinis.

Hab. in foliis Iridis Pseudacori, I. pumilæ etc. in Ger-
 mania, Britannia, Italia. — Var. **anceps** Sacc. Ann. Mycol. VII
 (1909) pag. 4. — A typo differt imprimis peritheciis hinc inde
 dense maculiformiter confertis, amphigenis et a *Sph. Desmazieri*
 ascis (etsi immaturis!) sporidiisque multo majoribus. — In foliis
 morientibus Iridis Pseudacori, Eichwalde pr. Berolinum (H.
 Sydow). — In exempl. immaturis: perithecia 120-130 μ . diam.,
 asci 60 \times 9; sporidia 12-15 \times 4 (?).

87. **Sphærella Musæ** Spegazz. An. Mus. Nac. Buenos Aires, t. XIX 3795
 (1909) p. 354. — Maculis nullis vel fusciscentibus obsoletis; pe-
 ritheciis innatis lenticularibus membranaceis, late ostiolato-perfo-
 ratis, atris, glabris, 80-90 μ . diam.; ascis obclavatis, aparaphysa-
 tis, octosporis 38-40 \times 6-8; sporidiis e cylindraceo subfusoides me-
 dio vix constrictis, loculis æquilongis, minute biguttulatis, 12-13 \times 2.

Hab. ad folia dejecta putrescentia Musæ sapientum in
 hortis Orán, Jujuy, Rep. Argentina Amer. austr.

88. **Sphærella Cannæ** Speg., An. Mus. Nac. Buenos Aires t. XIX 3796
 (1909) p. 350. — Maculis nullis, matrice tota sordide pallescente;
 peritheciis innatis, sparsis v. laxissime gregariis amphigenis e len-
 ticulari globulosis 90-100 μ . diam., submembranaceis atris, glabris;
 ascis fusoides, breviter crassiusculeque pedicellatis 40 \times 10, aparaphysatis,
 octosporis; sporidiis ellipsoideo-fusoides, didymis, 12 \times 4,
 loculis minute biguttulatis, infero leniter minore.

Hab. ad folia dejecta putrescentia Cannæ indicæ in horto
 Santa Catalina, prope Buenos Aires Rep. Argentina Amer. austr.

89. **Sphærella frenumbensis** Speg., Fungi Paul., Rev. Mus. La Plata 3797
 t. XV (1908) p. 19. — Maculis arescentibus indeterminatis, 5-25
 mm., amphigenis; peritheciis erumpentibus sparsis v. laxè grega-
 riis plerumque epiphyllis, minutis, e globoso lenticularibus 75-100 μ .
 minute ostiolatis, atris, glabris, contextu parenchymatico fusco-fu-

ligineo; ascis ellipsoideis v. subovatis, crassissime tunicatis brevissimeque noduloso-pedicellatis, $30-40 \times 8-10$, aparaphysatis, octosporis; sporidiis subclavulatis, $10-12 \times 8-10$, loculis æquilongis donatis, ad septum non constrictis, conglobatis v. distichis, hyalinis.

Hab. ad folia languida Palmæ pinnatifidæ (Cocoes?) cujusdam, prope Frenumbé Brasilia (USTERI). — Species *Sph. Gastonis* Sacc. peraffinis sed biophila et sporis nonnihil majoribus distincta.

90. **Sphærella chusqueicola** Speg., Fungi Chilenses (1910) p. 57. — 3798

Maculis nullis; peritheciis epiphyllis innato-erumpentibus superficialibus minutis, glabris, membranaceis, vix papillulato-ostiolatis $120-150 \mu$. diam.; ascis e cylindraceo-lanceolatis brevissime crasseque pedicellatis, $80 \times 15-18$; sporidiis e cylindraceo subclavulatis utrinque obtusis, medio 1-septatis non constrictis, hyalinis, medio-cribus, $18-20 \times 5$.

Hab. in foliis siccis non dejectis Chusqueæ Cumingii, Cerro Caracol de Concepcion, Chile Amer. austr.

91. **Sphærella Usteriana** Speg., Fungi Paul., Rev. Mus. La Plata t. XV 3799

(1908) p. 20. — Maculis nullis; peritheciis sparsis v. amphigenis seriatim constipatis et erumpentibus, hemisphærico-lenticularibus, $50-75 \mu$. cr., atris, glabris, minute ostiolatis, membranaceis, contextu parenchymatico fuligineo; ascis subfasciculatis, antice attenuato-obtusatis crassissimeque tunicatis, $26-28 \times 13-14$, aparaphysatis, octosporis; sporidiis conglobatis, subovatis $10-12 \times 3$, medio uni-septatis leniter constrictis utrinque obtusiusculis, hyalinis.

Hab. ad folia arida Oryzæ sativæ prope Sao Paulo, Brasilia (USTERI). — Species a cæteris in eadem matrice vigentibus satis riteque distincta.

92. **Sphærella Hondai** I. Miyake, Pilze Reispfl. Japan, Journ. College 3800

Agric. Tokyo, II (1910) p. 245 t. XIII, f. 9-11. — Peritheciis immersis, papilla tenui prominulis, globosis v. ellipsoideis, $50-60 \mu$. diam., raro 40μ . v. 80μ ., nigro-brunneis; ascis clavatis, breviter pedicellatis, rectis v. subcurvulis, $30-50 \times 9-14$, octosporis; sporidiis distichis v. irregulariter tristichis, bilocularibus, loculis inæqualibus, medio non constrictis, ovoideis, chlorinis, $10-14 \times 3-4,5$.

Hab. in foliis Oryzæ sativæ, Suigen, Korea (K. IWAMOTO), Tochigi, Iaponia (K. TSUCHIYA).

93. **Sphærella Shiraiana** I. Miyake, Pilze Reispfl. Japan, Journ. Col- 3801

lege Agricult. Tokyo, II (1910) p. 242, t. XIII, f. 4-8. — Peritheciis immersis, globosis v. ellipsoideis, $70-95 \mu$. diam., $55-80 \mu$.

alt., nigris, pseudoparenchymaticis; ascis clavatis breviter pedicellatis 35-45 \times 11-15, octosporis; sporidiis supra plerumque tristichis infra monostichis, fusioideis, granuloso-farctis, 14-16 \times 4,5-5,5, bilocularibus, medio constrictis, loculis inæqualibus.

Hab. in foliis *Oryzæ sativæ* in Japonia et China.

94. **Sphærella bambusicola** (M. et H.) Sacc. et Trott., *Mycosphærella* 3802 *bambusicola* Miyake et Hara in Bot. Mag. Tokyo (1910) p. (338) [japonice].

Hab. in foliis *Bambusæ* sp. in Japonia.

95. **Sphærella striatiformans** (Cobb) Sacc. et Trott., *Mycosphærella* 3803 *striatiformans* Cobb B. A. Fungous Maladies of the Sugar-Cane III, Leaf-Splitting, Blight, Hawaiian Sugar Planters Exp. St. Bull V (1906) pp. 93-106, Duggar Fung. Diseases, p. 263. — Folia rimose findens et demum in filamenta redigens; peritheciis copiosis, ascigeris...

Hab. in foliis *Sacchari officinarum*, cui valde noxia, in insulis Hawai. — A *Sph. Sacchari* Speg. videtur diversa.

96. **Sphærella Calamagrostidis** (Volk.) Sacc. et Trott., *Mycosphærella* 3804 *Calamagrostidis* Volk., Rehm Ascom. exsicc. n. 1667 (1906) (sine diagnosi. — Peraffinis *Sph. Tassianæ* a qua differt peritheciis vertice non conoideis.

Hab. in foliis *Calamagrostidis* variæ, Fürstenalp, Graubünden Helvetiæ.

97. **Sphærella kerguelensis** P. Henn., Deutsche Südpolar-Exped. VIII 3805 (1906) p. 9 (extr.). — Peritheciis in maculis exaridis pallidis sparsis, innato-erumpentibus, subglobosis, vertice perforatis, membranaceis, atris, 80-100 μ . diam.; ascis fasciculatis, clavatis v. subfusioideis, apice obtusis, substipitatis, curvatis, aparaphysatis, 25-30 \times 10-13; sporidiis subdistichis v. conglobatis, fusioideis, subacutiusculis, hyalinis, medio 1-septatis, rectis v. curvulis, 10-12 \times 3-3,5.

Hab. in foliis vaginisque *Festucæ kerguelensis*, Kerguelen-Station insul. Kerguelen (E. WERTH).

98. **Sphærella paleicola** P. Henn., Deutsche Südpolar-Exped. VIII 3806 (1906) p. 9 (extr.). — Peritheciis paleicolis sparsis vel gregariis, innato-suberumpentibus, globulosis, atro-membranaceis, poro pertusis, 50-60 μ . diam.; ascis subovoideis vel late fusioideis, apice obtusis, tunicatis, octosporis, aparaphysatis, 22-28 \times 13-15; sporidiis conglobatis, fusioideis, hyalinis, 1-septatis, 10-12 \times 3-3,5.

Hab. in paleis siccis *Festucæ erectæ* Südmire in insula Kerguelen.

99. *Sphærella Ephedræ* Hollós, Ann. Mus. Nat. Hung. IV (1906) 3807 p. 331. — Peritheciis epidermide tectis, dense gregariis, depressoglobosis, nigris, apice pertusis, 100-150 μ . diam., contextu parenchymatico; ascis clavatis, estipitatis 6-8 sporis, 56-70 \times 20-24, apapophysatis; sporidiis inordinate distichis, oblongis, medio 1-septatis, constrictis, utrinque rotundatis, initio hyalinis, dein flavidulis, 2-guttulatis vel eguttulatis, 16-24 \times 6-8, loculo superiore plerumque paullo crassiore.

Hab. in ramis siccis *Ephedræ distachyæ* prope Kecske-mét Hungariæ.

100. *Sphærella pinifolia* Ducomet, Ann. Ecole nat. Agricult. Rennes 3808 t. II (1908) extr. pag. 23, fig. 7-13. — Thallo præcipue superficiali; mycelio brunneo catenulato; pycnidiis variabilibus, aliis parum evolutis, parvis, cupuliformibus, 20 μ . c. cr., aliis evolutis, ostiolatis, 60 μ . c. cr.; sporulis hyalinis fusiformibus, guttulatis, 5 \times 1,5; peritheciis scutatis, 86-110 \times 45-50; stratu corticali crasso et nigro; ascis curvatis 22-25 \times 7,5-9, octosporis; paraphysibus nullis; sporidiis hyalinis, bicellularibus, guttulatis, curvis, utrinque rotundatis, 9 \times 2,5-3.

Hab. in foliis vivis *Pini maritimæ*, Lot-et-Garonne Galliæ.

101. *Sphærella callistea* Syd., Ann. Mycol. VII (1909) p. 439, Myc. 3809 cotheca germanica, fasc. XVI-XVII, num. 785. — Maculis amphigenis valde conspicuis, irregularibus, præcipue apicem foliorum occupantibus, linea obscuriore cinctis, flavo-brunneis; peritheciis epiphyllis plus vel minus dense gregariis, depresso globosis, 80-140 μ . diam., atris, membranaceis, diutius tectis, medio pertusis; ascis apapophysatis, oblongo-clavatis, apice rotundatis, sessilibus v. subsessilibus, 50-90 \times 16-20, octosporis; sporidiis conglobatis v. distichis, ellipsoideis, utrinque obtusis, medio v. prope medium constricto-1-septatis, hyalinis, strato mucoso hyalino tenui cinctis, 18-22 \times 9-12, loculo altero sæpe paullo majore.

Hab. ad folia viva *Osmundæ regalis* pr. Müritz Germaniæ (Sydow).

102. *Sphærella Asplenii* Awd. - Syll. I, pag. 533 - var. *Aspidii* v. 3810 Höhn. in litt., in Rehm, Ascom. Exsicc., fasc. 43, num. 1809 et Ann. Mycol. VII (1909) pag. 136. — Sporidiis 12-13 \times 2-3; ascis 32-36 \times 7-8; peritheciis 90-100 μ .

Hab. in frondibus siccis vetustis *Aspidii Filix-mas*, Schladning Styriæ sup. (HöHNEL).

103. *Sphærella aquilina* (Fr.) Auersw. - Syll. I, pag. 532 - f. *Aspi-* 3811

diorum Sacc., Ann. Mycol. VII (1909) p. 435. — Peritheciis hinc inde maculiformiter gregariis, epiphyllis, 70-80 μ . diam.; ascis 32-34 \times 6-7; sporidiis 9 \times 2,5.

Hab. in frondibus languidis *Aspidii* sp. ad Tiefensee pr. Werneuchen (H. Sydow). — Conferenda cum *Sph. Asplenii* v. *Aspidii* v. Höhn.

104. **Sphærella Ascophylli** (Cotton) Sacc. et Trott., *Mycosphærella* 3812
Ascophylli Cotton, Trans. Brit. Mycol. Soc. 1908 v. III (1909) p. 95, tab. IV. — Peritheciis minutissimis, piriformibus, nigris, sparsis, immersis, 100-130 \times 80-90, ostiolo minuto non prominenti; ascis paucis, oblongis, sæpe curvulis, apice incrassato-tunicatis, octosporis, 50-60 \times 18-20, aparaphysatis; sporidiis distichis, fusoides, 1-septatis, non constrictis, 18-21 \times 4-5, hyalinis.

Hab. in receptaculis vivis *Ascophylli* nodosi (algæ) in mari ad littora Britanniae, ins. Faeroe, Heligoland Sueciae. — Mycelium intra matricis receptacula diffusum.

Sphærellæ species non satis notæ, memoratæ in Syll. vol. XX p. 830, sunt: **Sphærella Alchemillæ** Kalchbr. — **Sph. chalcographa** Kalchbr. — **Sph. minuta** Auersw.

EPICYMATIA Fuck. — Syll. I p. 570, XI p. 303, XVI p. 485.

1. **Epicymatia Balani** Winter apud Hariot in Journ. de Bot. I (1887) 3813
 p. 233. — Peritheciis gregariis, immersis, demum vertice tantum emergentibus, subglobosis, poro simplici pertusis, membranaceo-coriaceis, atris, 120-140 μ . diam.; ascis clavatis, deorsum substipitatis, vertice late rotundatis, mox diffluentibus, octosporis, 60 \times 17-19; sporidiis subdistichis, oblongo-subclavatis, utrinque attenuatis, sed rotundatis, medio 1-septatis et vix constrictis, hyalinis, 19-23 \times 6-7.

Hab. in thallo *Brachytrichiae* *Balani* (algæ), in mari ad Saint Malo Galliae (BORNET).

REHMIELLOPSIS Bubák et Kabát, Naturw. Ztschr. f. Land-u. Forst-wirtschaft. (1910) pag. 320 (Etyim. *Rehmiella* et *opsis* facies). — Stromata nulla; perithecia subepidermica, immersa, globoso-conica, apice erumpentia, coriacea, contextu pseudoparenchymatico, nigro-fusco; ascis 10-24-sporis, fusoides v. clavatis, breve stipitatis, aparaphysatis; sporidiis ellipsoideis v. oblongis, uniseptatis, utrinque rotundatis, hyalinis. — A *Mycosphærella* Johans. em. Sacc. — Syll. IX, p. 659. — ægre distinguendum genus.

1. **Rehmiellopsis bohémica** Bubák et Kabát, l. c. fig. 3-4. — Peri- 3814
 theciis globoso-conoideis, apice conico protuberantibus, 150-200 μ .
 latis, nigris, opacis, crasse tunicatis, contextu pseudoparenchyma-
 tico, nigro-fusco; ascis aparaphysatis, polysporis (10-24), clavatis
 v. fusoides, 50-90 μ . longis, 20-24 latis, rectis v. parum curvatis,
 apice rotundato-attenuatis, basi paulatim attenuatis, brevi-stipita-
 tis, tunica tenui, facile in aqua intumescente; sporidiis ellipsoideis
 v. oblongis, 13-21 \times 5-6, hyalinis, uniseptatis, utrinque rotundatis,
 altera cellula semper angustiore.

Hab. in foliis *Abietis albæ*, Turnau, Bohemia. — *Socia*
Phoma bohémica Bub. et Kab.

STIGMATEA Fr. — Syll. I p. 541, IX p. 660, XIV p. 534, XVI
 p. 478, XVII p. 649.

1. **Stigmatea Mespili** Sorauer, Monatschr. d. Ver. Beförd. d. Gartenb. 3815
 Preuss. (Jan. 1878) et Pflanzenkr. 2 Aufl. II, p. 372. — Perithe-
 ciis innato-superficialibus, sparsis v. in soros minutos confertis,
 globosis v. globoso-depressis, atro-brunneis, 100-175 μ . diam., o-
 stiolo vix perspicuo; ascis clavatis, 62-110 \times 12-25; sporidiis disti-
 chis, ovoideis v. breve clavulatis obtusis, constricto-1-septatis, hya-
 linis, 18-25 \times 6-7,5; paraphysibus filiformibus v. clavulatis.

Hab. ad folia viva, quæ infuscantur et pereunt Piri, Cydo-
 niæ, Cotoneasteris et Mespili in Germania, Helvetia,
 Italia, Amer. bor. — Status pycnidicus vel potius conidicus est
Entomosporium maculatum Lévl.

2. **Stigmatea lauricola** Rehm, Ascom. exs. fasc. 44, n. 1847, Ann. 3816
 Mycol. VII (1909) p. 404. — Peritheciis hypophyllis, gregariis,
 primitus minutissime papillulatis, 100 μ . diam., contextu tenui
 parenchymatico, flavo-fusco; ascis subclavatis, teneris, apice ro-
 tundatis, 90-100 \times 15-18; sporidiis oblongis, rectis, utrinque rotun-
 datis, medio 1-septatis leniterque constrictis, hyalinis, intus sæpe
 minutissime granulosi, 20-24 \times 7-8, distichis; paraphysibus filifor-
 mibus, septatis, 4-8 μ . cr.

Hab. ad folia putrescentia Lauri nobilis, pr. Ziebigk, Des-
 sau Germaniæ (STARITZ).

3. **Stigmatea plantaginicola** Speg., An. Mus. Nac. Buenos Aires t. XIX 3817
 (1909) pag. 358. — Maculis nullis v. obsoletissimis plus minusve
 diffusis lutescenti-pallescentibus; peritheciis epiphyllis superficia-
 libus lenticularibus, 60-80 μ . diam., obsolete impresso-ostiolatis, hy-
 phis marginalibus parvis radiantibus septulatis gracilibus 4 μ . cr.

olivaceis ornatis; ascis ovoideis $28 \approx 10-14$, ap paraphysatis, octosporis; sporidiis conglobatis, ellipsoideo-subclavulatis, didymis, hyalinis, $10-11 \approx 4$, loculis subæqualibus grosse 1-guttulatis.

Hab. ad folia viva Plantaginis myosuri in pratis circa Ensenada Rep. Argentina America austr.

4. **Stigmatea quercina** Rehm, in Krieger; Ann. Mycol. IV (1906) 3818 p. 40. — Peritheciis in epiphyllis haud mutato gregarie innatis ab eoque paullulum protuberante tectis, demum denudatis, globulosis, excipulo molli, membranaceo, fuscidulo, poro pertusis, sicco nigrescentibus, glabris $150-180 \mu$. diam.; ascis cylindratis, $70-75 \approx 8-9$, octosporis; sporidiis ellipsoideis, medio septatis, haud constrictis, hyalinis, $9-10 \approx 4,5-5$, monostichis; paraphyses desunt.

Hab. ad folia Quercus prope Königstein a/E. — *Sphaerellæ Esculi* Cocc. et Mor. affinis.

5. **Stigmatea Hepaticarum** Patouill., Bull. trim. Soc. Myc. de France, 3819 vol. XXI (1905) pag. 121. — Peritheciis solitariis, superficialibus $300-500 \mu$. diam., nigris, glabris et æqualibus, coriaceo-membranaceis, subglobosis v. conoideis, apice truncatis, depressis et ostiolatis; ascis cylindratis, stipitatis $80 \approx 15$, octosporis; paraphysibus copiosis, linearibus, valde ramosis; sporidiis hyalinis, distichis, uniseptatis, medio constrictis, loculis inæqualibus, multiguttulatis, $18-22 \approx 7-8$; pycnidiiis (*Pyrenochaeta Hepaticarum*) sparsis, nigris, opacis, ventricosis $75-120 \mu$. diam., collo $60 \approx 30$ apice setuloso præditis; sporulis hyalinis, ovoideis $4-5 \approx 3$ biguttulatis, copiosis conglutinis, cirrum cylindraticum efformantibus; spermogoniis globulosis 60μ . diam., nigris, apice ostiolatis; sporulis hyalinis, cylindratis, rectis v. curvulis $3 \approx 1$.

Hab. ad thallum Lunulariæ sp., Algeria Africa bor.

6. **Stigmatea Velenovskyi** Bubák, Ann. Mycol. IV (1906) p. 109. — 3820 Peritheciis superficialibus, globoso-lenticularibus, $60-90 \mu$. diam., atro-brunneis, sparsis v. in soros minutos confertis, hyphis mycelii ramosis, castaneis, crebro septatis, adpresse radiantibus cinctis, ostiolo centrali 20μ . diam., contextu parenchymatico, crassiusculo; ascis ovoideis, $22-35 \approx 15-17$, apice late rotundatis, incrassatis, brevissime pedicellatis, octosporis; sporidiis oblongis, $11-15,5 \approx 4,5-5,5$, utrinque rotundatis, inæqualiter bicellularibus, hyalinis, ad septum constrictis, 2-guttatis, cellula superiori pro more paullo latiore.

Hab. ad folia Hypni ochracei, Weisswassergrund, Riesengebirge Bohemiæ (VELENOVSKY).

VENTURIA De Not. — Syll. I p. 586, IX p. 687, XI p. 305, XIV p. 541, XVI p. 489, XVII p. 650.

I. *Euventuria*: sporidia hyalina, achroa.

1. *Venturia sphærelloidea* von Höhn., *Fragm. Mykol.* VIII (1909) 3821 p. 47. — Peritheciis gregariis subcutaneis, e basi ovoidea globulosis, 100-120 μ . lat., 140 μ . alt., contextu tenui brunneo præditis, circa ostiolum setulis 1-3 brunneis, continuis, obtusis, 10 \times 4 usque ad 60 \times 6-7 ornatis, basi hyphulis pallidis 2-3 μ . cr., repentibus cinctis; ascis aparaphysatis, fusoideo-clavulatis, sessilibus, octosporis, tenui-tunicatis, 32-44 \times 5-8; sporidiis mono-distichis, fusoideis, hyalinis, bicellularibus, 4-guttulatis, utrinque acutulis, medio non constrictis, 10-12 \times 3-4, cellulis æqualibus.

Hab. in caulibus emortuis *Impatiensis* Nolitangere, Sonntagsberg Austriæ inf. (P. STRASSER).

2. *Venturia Missionum* Speg., *An. Mus. Nac. Buenos Aires* t. XVII 3822 (1908) p. 121. — Superficialis, dense gregaria, minutissima, nigra; peritheciis globosis v. subdepressis 90-100 μ . diam., ostiolo minuto perforatis, setulis laxis acutis, 30-50 \times 8-6, non bulbosis adspersis, contextu coriaccello indistincto, atro; ascis clavulatis, aparaphysatis, apice rotundatis, deorsum cuneatis breviterque noduloso-pedicellatis, 35-40 \times 8-9, octosporis; sporidiis distichis, ellipsoideis, utrinque obtusiusculis, 10 \times 4, 1-septatis, vix constrictis, hyalinis, 2-guttulatis.

Hab. ad ramulos languidos v. emortuos *Ilicis paraguariensis* (*Yerba*) in dumetis circa S. Pedro, Misiones, Argentina.

3. *Venturia pirina* Aderhold *Landw. Jahrb.* XXV (1896) p. 875, *Vent. ditricha* f. *Piri* Bref. *Unters.* X, t. VII, f. 59, *Sphærella sentina* (Fr.) Sacc. Syll. I, pag. 482, non Fuck. — Peritheciis confertis v. gregariis, sæpius hypophyllis, erumpentibus, globosis, 120-160 μ . diam., breviter v. longiuscule papillatis, setulis paucis circa ostiolum coronatis, deorsum sæpius calvis; ascis 8-sporis, saccatis, infra medium incrassatis, 40-70 μ . longis; sporidiis infra distichis, sursum monostichis, oblongatis, flavo-viridibus, 14-20 \times 5-8, inæqualiter bicellularibus, cellula super. crassiore et duplo longiore, rarius oculis subæqualibus.

Hab. in foliis *Piri communis* in Germania, Helvetia, Fennia, Britannia, Italia, Gallia, Amer. bor. — Status conidicus: *Fusicladium pirinum* (Lib.) Fuck. — Syll. IV, p. 346. — Conidio-

phoris erectis, simplicibus, plerumque continuis, brunneis, nodulosis, 20-60 sæpius 40 μ . long.; conidiis fusoideis v. navicularibus, continuis, dein 1-septatis, 20-25 \times 5-8.

4. *Venturia Usteriana* Speg., Fungi Paul., Rev. Mus. La Plata t. XV 3824 (1908) p. 21. — Maculis amphigenis indeterminatis pallescentibus; peritheciis hinc inde gregatim erumpentibus, sæpius hypophyllis, udis globosis, siccis corrugato-collapsis, 60-100 μ . diam., astomis?, membranaceo-coriacellis, contextu dense minuteque parenchymatico fuligineo donatis, setulis divaricatis simplicibus 2-3-cellularibus acutiusculis, 20-40 \times 4-5, fumosis adspersis; ascis e fusoideo cylindraceutis, antice subtruncato-rotundatis postice breviter cuneatis, pedicello brevissimo crassoque suffultis, 50-60 \times 7-9, pseudoparaphysibus paucis circumdatis; sporidiis octonis oblique distichis 14-15 \times 3-3,5, apice supero obtuso, infero subacutiore, medio non constrictis, hyalinis.

Hab. ad folia viva Compositæ cujusdam in Horto botanico Sao Paulo Brasiliæ (USREER). — Cum peritheciis ascophoris adsunt pycnidia nonnulla simillima, sporuligera, sporulis ellipsoideis utrinque acutiusculis 3-5 \times 1,5 minute biguttulatis, hyalinis.

5. *Venturia pellita* Hazsl., Sphær. Hungar. p. 127, t. VIII, f. 33 (1892). 3825 — Peritheciis globosis, minutis, gregariis, totam superficiem caulium occupantibus, excepto ostiolo setis nigris septatis tectis; ascis clavatis, basim versus æqualiter attenuatis in infima tertia parte vacuis, aparaphysatis; sporidiis uniseriatis, cuneiformibus, 1-septatis, loculo super. subgloboso, inferiori cylindraceuto, rarius cylindraceutis, 14-16 \times 4, hyalinis.

Hab. in caule Cardui acanthoidis ad radices Tatræ Hungariæ.

6. *Venturia Bellotæ* Speg., Fungi Chilenses (1910) p. 50. — Peritheciis hypophyllis laxè pauci-gregariis (3-10) superficialibus subglobosis, atris, submembranaceis, 90-110 μ . diam., setulis 8-10 nigris opacis, 50-60 \times 4-5 hirtis; ascis sublanceolatis aparaphysatis subsessilibus, 30 \times 4, octosporis; sporidiis cylindraceuto-subfusoideis parvis ad septum medium non constrictis, 9-10 \times 2-2,5.

Hab. in foliis siccis dejectis *Cryptocaryæ Bellotæ* in silvis Cerro Caracol de Concepcion, Chile Amer. austr.

7. *Venturia Puyæ* Speg., Fungi Chilenses (1910) p. 51, cum icon. — 3827 Maculis nullis; peritheciis pusillis sparsis v. laxè gregariis, globosis, dense setuliferis, atris, 100-120 μ . diam., setulis 10-20, 40-80 \times 6-10; ascis subcylindraceutis brevissime pedicellatis, aparaphysatis, octo-

sporis, 50-55 \times 7-8; sporidiis ellipsoideis, ad septum non constrictis hyalinis, 9-12 \times 4-5.

Hab. in foliis emortuis subputrescentibus Puyæ cæruleæ, Cerro San Cristobal de Santjago, Chile Amer. austr.

8. *Venturia corralensis* Speg., Fungi Chilenses (1910) p. 51. — Ma- 3828
culis nullis; peritheciis sparsis superficialibus, atris, sublenticularibus, 90-120 μ . diam., margine setulis 5-7 atris, opacis radiantibus, 60-70 \times 5-7 ornatis; ascis sporidiisque desideratis.

Hab. in foliis emortuis siccis Unciniae erinaceæ, Bahia de Corral Chile Amer. austr.

9. *Venturia Hariotiana* Speg., Fungi Paul., Rev. Mus. La Plata t. XV 3829
(1908) p. 20. — Maculis amphigenis majusculis impressis, 5-15 mm. diam., margine acute elevatis, callosis, fuscescentibus, eximie limitatis, primo sordide pallideque fulvellis, serius albido-cinere-scentibus; peritheciis sæpe circinantibus numerosis parvulis 100-120 μ . diam., globoso-depressis, subastomis v. minute fimbriato-ostiolatis, setulis patulis minutis 20-30 \times 4-5 fuligineis, uni-cellularibus densiuscule vestitis, basi hyphis repentibus radiantibusque concoloribus 50-100 \times 6, septulatis cinctis, coriacellis, contextu indistincto; ascis e cylindraceo subfusoides 60 \times 10, antice subtruncato-rotundatis, postice brevissime noduloseque stipitatis, apara-physatis, octosporis; sporidiis oblique distichis utrinque acutiusculis, 15-16 \times 3-4, uniseptatis, ad septum constrictulis, loculis minute bi-guttulatis, hyalinis.

Hab. ad folia arida subputrescentia Oncidii cujusdam, Ipiranga Moça Brasilia (USTERT). — Species *Trichosphaeriæ Hariotianæ* Karst. valde affinis; an ejusdem forma juvenilis?

II. *Chromoventuria*: sporidia colorata.

10. *Venturia austro-germanica* Rehm, Oesterr. bot. Zeitschr. L VI 3830
(1906) p. 295 et Ann. Mycol. V (1907) p. 538. — Peritheciis dispersis, sessilibus, globulosis, poro minutissimo pertusis, atris, membranaceis c. 150 μ . diam., setis numerosis, sparsis, rectis, acutatis, subfuscis 100 \times 4-5 ubique obsessis; ascis fusiformibus vel subclavatis, sessilibus, 60-70 \times 15, 8-sporis; sporidiis oblongo-fusiformibus, utrinque rotundatis, medio septatis, vix constrictis, cinereo-fuscis, 20-24 \times 7-8, distichis; paraphysibus paucis, filiformibus, 2 μ . cr.

Hab. ad folia sicca Salicis in jugo Schrofенpass inter Tiro-

liam et Algoviam bav. 1750 m. (Dr. REHM). — Affinis *Venturice Niesslii*, sed sporidia æquicellularia, colorata.

11. *Venturia Frangulæ* Krieg., Ann. Mycol. VII (1909) p. 542, Krieg., 3831

Fungi saxon. n. 2068. — Peritheciis plerumque hypophyllis, confertis, globosis, 60-80 μ . diam., circa ostiolum setulis 22-30 \times 3-6 præditis; ascis cylindrico-ovoideis, sessilibus v. brevissime pedunculatis, octosporis, 34-45 \times 6-10; sporidiis distichis, ellipsoideis v. ovoideis, septatis, griseo-fumosis, 7-10 \times 2-4, paraphysibus paucis.

Hab. in foliis putrescentibus *Frangulæ Alni* prope Königstein Germania.

12. *Venturia Antherici* Hollós, Ann. Mus. Nat. Hungar. VIII (1910) 3832

p. 9. — Peritheciis seriatim dispositis, erumpentibus e basi globosa conicis, 140-160 μ . diam., contextu celluloso, apice setis rigidis, 100-140 \times 5, fusco-atris obsitis; ascis clavatis, brevissime stipitatis, 75-80 \times 10-12, octosporis, filiformi-paraphysatis; sporidiis distichis, oblongo-ellipsoideis, medio 1-septatis, constrictis, 4-guttulatis, dilute olivaceis, 16-18 \times 4-5.

Hab. in foliis siccis *Antherici Liliaginis* prope Nagy-Körös Hungariæ.

COLEROA Fr. ut subg. (1849) em. Rabenh. Herb. Mycol. n. 1456 (1850), Winter Krypt. Flora, Pilze II, p. 198 (Etym. *colerai* oves breviter lanatæ). — A gen. *Venturia* distinguitur imprimis peritheciis ab initio superficialibus, semper biogenis. — Plures species *Venturice* in Syll. descriptæ ad hoc genus transferendæ sunt. Cfr. Wint. l. c.

1. *Coleroa spinarum* v. Höhn., Ann. Naturhist. Hofmus. Wien, XX 3833

Heft 4 (1905) pag. 2 (extr.). — Peritheciis sparsis v. cæspitosis, superficialibus, nigris, excipulo tenui, globosis, 120-220 μ . diam., ostiolo obsolete, fragilibus, extus setulis copiosis, nigris, rigidis, acutis, opacis, simplicibus, 150 \times 5-6, conspersis; nucleo carneo; ascis aparaphysatis, clavatis, subcarneis, tenuibus, 60-64 \times 9-10; sporidiis octonis, 2-3-stichis, bicellularibus, plerumque non constrictis, hyalinis, late fusoides, utrinque acutis, 12-14 \times 4-5, intus granulosi.

Hab. ad spinas *Astragali* sp. pr. Erdschias-Dagh Asiæ minoris (A. PENTHER et E. ZEDERBAUER).

2. *Coleroa venturioides* Speschn., Die Pilzparasiten d. Teestrauches 3834

(1907) p. 19, tab. III, fig. 14-19. — Peritheciis gregariis, subglobosis, cupuliformibus, ochraceis, primo epidermide leviter tectis, dein epiphyllis, subsuperficialibus, 100-130 μ . lat., 50-80 μ . altis,

setulis flexuosis, septatis, fuligineis, 50-60 \times 5-6 vestitis; ascis clavatis, 30-40 \times 8-10, aparaphysatis, octosporis; sporidiis oblongo-ovoideis, dilutissime chlorinis, 14 \times 8.

Hab. in maculis brunneolis indistinctis foliorum *Theæ sinensis* pr. Batum Caucasi.

3. **Coleroa Elasticæ** Koord., Bot. Untersuch. (1907) p. 186, f. 17 I. 8835

— Peritheciis sparsis, superficialibus, amphigenis v. corticulis, imprimis hypophyllis, coriaceis, atris, globosis, plerumque basi longe setulosis, apice ostiolo orbiculari pertusis, 90-110 μ . diam.; ascis clavatis, apice rotundatis, 8-sporis, 35 \times 12 apice haud incrassatis, aparaphysatis; sporidiis biseriatis, ovoideo-fusiformibus, medio 1-septatis, non constrictis, utrinque rotundatis, pallide olivaceis, 7-10 \times 2,5-3; setulis 200-390 μ . longis, atris, apice acuminatissimis, rectis v. curvulis.

Hab. in foliis emortuis et in cortice ramulorum *Fici elasticæ* prope Loano, Purworedjo prov. Kedu insulæ Java (Koorders). — *Venturiæ Elasticæ* Pass. proxima.

DIDYMELLA Sacc. — Syll. I p. 545, IX p. 661, XI p. 301, XIV p. 535, XVI p. 479, XVII p. 653.

1. **Didymella Adonidis** Moesz, Gomb. Budapest I in Bot. Közlem. (1909) 8836

p. 8, t. II, f. 2 a-c. — Peritheciis sparsis v. subgregariis, epidermide tectis, dein erumpentibus, minutis, atris, epapillatis, 66-133 μ . diam., contextu parenchymatico, fuligineo; ascis clavatis, stipitatis, 50-66 \times 12-13, octosporis, paraphysibus filiformibus obvallatis; sporidiis subtristichis, oblongo-ellipsoideis, rectis vel leniter curvatis, 19-26,5 \times 3-4,5, hyalinis, uniseptatis, non constrictis, multiguttulatis.

Hab. in petiolis siccis *Adonidis vernalis*, prope Budapest Hungaria.

2. **Didymella Alyssi** Hollós, Ann. Mus. Nat. Hungar. V (1907) p. 47. 8837

— Peritheciis gregariis sparsisve, erumpentibus, globosis, ostiolatis, nigris, nitidulis, 280-350 μ . diam.; ascis clavatis, apice rotundatis et incrassatis, stipitatis, octosporis, 90-100 \times 14-16, filiformi-paraphysatis; sporidiis distichis v. oblique monostichis, oblongis, apice leniter attenuatis, rectis v. curvulis, medio 1-septatis, non v. constrictis, interdum inæqualibus, 4- v. pluriguttulatis, hyalinis, denique luteolis, 26-32 \times 7-8.

Hab. in caulibus siccis *Alyssi tortuosi* prope Kecskemét Hungariæ.

3. *Didymella Delphinii* Earle, Bull. of the N. York Bot. Gard. (1904) 3838 p. 293. — Peritheciis late sparsis, in areis amplis dealbatis innatis, demum partim expositis, nigris, subsphæroideis, prominulis, non collabentibus, 250-300 μ . diam., ostiolo minute papillato; ascis clavatis, breviter stipitatis, 80-90 \times 12-14, parce et obsolete filiformi-paraphysatis; sporidiis distichis, hyalinis, anguste ovoideis v. subellipsoideis, subinæqualiter 1-septatis, constrictis, cellula latiore sæpe acutata, minore obtusa, 20-25 \times 7-8.

Hab. in caulibus emortuis *Delphinii* sp., Ormsby Co. Nevada Amer. bor. (C. F. BAKER).

4. *Didymella obscura* Rehm, Ascom. exsicc. fasc. 46, n. 1887 et Ann. Mycol. (1910) p. 300. — Peritheciis gregariis, innatis, sub epidermide caulem ambiente late denigrata nidulantibus, demum fere sessilibus, globulosis, minutissime papillulatis, nigris, ad basim hyphis abeuntibus longis, constricto-septatis, fuscis, 4-7 μ . cr. obsessis, 0,1-0,15 mm. latis, fusce membranaceo-contextis; ascis oblongis, sessilibus, 45-48 \times 12, octosporis; sporidiis ellipsoideis, medio septatis constrictisque, utraque cellula biguttulata, hyalinis, demum dilute flavescentibus, 12-14 \times 4-6, distichis; paraphysibus ramulosis.

Hab. ad caules siccos *Meliloti* albæ prope Königstein a. E. Saxoniæ (KRIEGER).

5. *Didymella Coriariæ* Speg., Fungi Chilenses (1910) p. 60. — Maculis nullis; peritheciis parvis subglobosis, submembranaceis, sparsis v. pauci-gregariis, cortice insidentibus, epidermide velatis, vix papillato-ostiolatis, 120-150 μ . diam.; ascis clavatis breviter pedicellatis paraphysatis, octosporis, 100 \times 15-16; sporidiis 1-septato-constrictulis, loculis subæqualibus grosse biguttulatis, 20-22 \times 6-7.

Hab. copiose in ramis siccis *Coriariæ* ruscifoliæ, Cerro Caracol de Concepcion Chile Amer. austr.

6. *Didymella Passifloræ* v. Höhnelt, Fragm. z. Mykol. in Sitzb. k. Ak. d. Wiss. Wien Bd. CXVI, Abt. I (1907) p. 123. — Peritheciis crebro gregariis, hypophyllis, areis vix cinerescentibus insertis, nigris, punctiformibus, 50-65 μ . diam., ovato-globulosis, papilla latiuscula; contextu brunneo celluloso; ascis parce crassiuscule paraphysatis, paucis, crasse clavatis, sæpe curvulis, sessilibus, 28-30 \times 10; sporidiis octonis, 2-3-stichis, hyalinis, bicellularibus, oblongo-cuneatis, 8-10 \times 2-2,5, cellula superiore plerumque paullulo crassiore et brevior.

Hab. in foliis *Passifloræ* sp. cultæ, Upalu in ins. Samoa Polynesiæ (Doct. RECHINGER).

7. *Didymella Eryngii* Moesz, Gomb. Budapest I in Bot. Közlem. (1909) 3342
pag. 8, t. II, f. 4. — Peritheciis subgregariis, epidermide tectis, dein erumpentibus, nigris, globosis v. depresso-globosis, papillatis, 140-360 μ . diam., ostiolo 43-57 μ . diam., contextu dense parenchymatico, olivaceo-fuligineo, apicem versus nigrescente; ascis cylindraceo-clavatis, breviter stipitatis, 133-167 \approx 17, octosporis, paraphysibus filiformibus obvallatis; sporidiis distichis, oblongis, inæquilateralibus, 33-43 \approx 5-6,5, hyalinis, uniseptatis, ad septum lenissime constrictis, multiguttulatis.

Hab. in caule emortuo *Eryngii* campestris prope Budapest, Hungaria.

8. *Didymella Fruticosæ* v. Höhnelt, Fragm. z. Mykol., Sitzb. k. Ak. 3343
d. Wiss. Wien, Bd. CXVI, Abt. I (1907) pag. 618. — Foliicola; maculis inæqualiter circularibus v. oblongis, amphigenis, 1-2 mm. lat., purpureo-brunneis, margine crassiusculo nigro; peritheciis hypophyllis, innatis, leviter prominulis, nigris, duriusculis, 100-140 μ . diam.; contextu olivaceo-nigricanti; ascis crasse clavatis, parce filiformi-paraphysatis, octosporis, 56-75 \approx 16-20, breve stipitatis, tunica crassiuscula; sporidiis 2-3-seriatis, dilute chlorinis, oblongo-clavatis, bicellularibus, minute pluriguttulatis, 20-26 \approx 6-6,5, medio non constrictis, cellula sup. paullulo latiore et brevior.

Hab. in foliis vivis *Bupleuri* fruticosi prope Bastia Corsicæ, frequens.

9. *Didymella Tupæ* Speg., Fungi Chilenses (1910) p. 60, cum icon. 3344
— Peritheciis laxè gregariis, lenticularibus, minute papillato-ostiolatis, epidermide velatis nigris, glabris, membranaceo-coriacellis, 120 μ . diam.; ascis subcylindraceis brevissime pedicellatis paraphysatis, octosporis, 100-110 \approx 16-18 sporidiis distichis, elliptico-biconoideis mediocribus sæpius pergrasse biguttulatis ad septum constrictulis, hyalinis v. obsolete fumosis 22-24 \approx 7-8.

Hab. in pedunculis emortuis *Lobeliæ* *Tupæ* prope Ciudad de Valdivia, Chile Amer. austr.

10. *Didymella Senecionis* Hollós, Ann. Mus. Nat. Hung. VI (1908) 3345
p. 529. — Peritheciis seriatis dispositis, erumpentibus, hemisphaericis, glabris, atris, membranaceo-coriaceis, papillatis, 300-350 μ . diam.; ascis clavatis, breviter pedicellatis, 110-120 \approx 10-12 octosporis; paraphysibus capiosis, filiformibus, 1 μ . cr.; sporidiis oblique monostichis, medio 1-septatis, constrictis, utrinque attenuatis, utraque cellula 2 guttulas oleosas magnas includente, hyalinis, 20-24 \approx 6-7.

Hab. in caulibus siccis *Senecionis paludosi* prope Kecskemét Hungariæ.

11. *Didymella Cocconia* Raciborski, Bull. Ac. Sc. Cracovie (1909) 3846 p. 390. — Peritheciis in soros convexos hinc inde collectis, 0,4-0,6 mm. diam., ostiolo punctiformi non prominulo præditis; nucleo albo, contextu nigro; ascis filiformi-paraphysatis, tereti-fusoides, copiosis, apice rotundatis, brevibus $38-46 \times 11-13$, octosporis; sporidiis bicellularibus, hyalinis, $12-15 \times 4$, ovato-fusoides, distichis; paraphysibus ascos superantibus.

Hab. in stromate *Cocconia* Placentæ ad folia *Symploci* spicata, in M. Pangerango ins. Javæ.

12. *Didymella sambucina* Rehm, Ann. Mycol. V (1907) p. 538. — 3847 Peritheciis in ligno decorticato, longe denigrato gregariis, subinnatis, hemisphærico-prominentibus, globulosis, atris, poro perspicuo pertusis, glabris, submembranaceis, 0,3-0,4 mm. diam.; ascis clavatis, 120×10 , octosporis; sporidiis ellipsoideis, utrinque obtusis, medio subconstrictis, utrinque 2-guttulatis, hyalinis, $12-15 \times 5$ distichis; paraphysibus filiformibus.

Hab. ad ramum decorticatum *Sambuci racemosæ* in valle Venna montis Brenner, ca. 1900 m., Tirolia (Dr. REHM). — Affinis *D. acerinae* sed sporidia minora, æquicellularia.

13. *Didymella Catalpæ* Hollós, Ann. Mus. Nat. Hung. V (1907) p. 47. 3848 — Peritheciis dense gregariis, erumpentibus, depresso-globosis, nigris, ostiolo brevi-papillato, 350-400 μ . diam.; ascis cylindræis, brevi-stipitatis, octosporis, $100-120 \times 10-12$, filiformi-paraphysatis; sporidiis monostichis, ellipsoideis, medio 1-septatis, constrictis, minute bi-guttulatis, hyalinis, $17-21 \times 8-10$.

Hab. in ramis siccis decorticatis *Catalpæ bignonioidis* prope Kecskemét Hungariæ.

14. *Didymella præclara* Rehm in Krieger, Ann. Mycol. IV (1906) 3349 p. 39. — Peritheciis dispersis, cortici immutato innatis, globulosis, collo minuto solum denigrato poroque pertuso hemisphærico-prominentibus, excipulo parenchymatico, molli, fuscidulo, 150 μ . diam.; ascis fusiformibus, apice rotundatis, sessilibus, sæpe subcurvatis, $50-60 \times 15$, 8-sporis; sporidiis acute fusiformibus, plerumque rectis, medio septatis, haud constrictis, hyalinis, 30×5 , tri-tetrastichis; paraphysibus tenerrimis, filiformibus, septatis, 2,5 μ . diam., gelatinosis.

Hab. ad ramulos *Vaccinii Myrtilli* prope Königstein ad Albim Germaniæ.

15. *Didymella ericina* (v. Tubeuf) Rehm, Ann. Mycol. V (1907) p. 538, 3850
Sphaeria ericina v. Tubeuf, Botan. Centralbl. XXI (1885) p. 15.
 — Peritheciis epiphyllis, in soros nigros sæpe magno numero collectis, globulosis, epidermide tectis, demum leniter prominentibus, 100-110 μ . diam., poro rotundo pertusis, non papillatis; contextu grosse pseudoparenchymatico, atro; ascis clavatis, sessilibus, apice rotundatis, $40 \approx 6$, octosporis; sporidiis longe cylindraceis, utrinque rotundatis, medio septatis, non constrictis, hyalinis, $10 \approx 2$, distichis; paraphysibus tenuibus filiformibus.
Hab. in foliis emortuis *Ericæ carneæ* a Schluderbach ad Landro Tiroliae merid. (Doct. v. TUBEUF).
16. *Didymella sachalinensis* Sacc., Ann. Mycol. VI (1908) p. 558. — 3851
 Peritheciis gregariis epidermide velatis, dein erumpentibus nudatisque, globoso-depressis, $\frac{1}{3}$ - $\frac{1}{2}$ mm. diam., nigris, brevissime papillatis, contextu membranaceo-subcoriaceo, denso, atro; ascis cylindraceis, brevi-stipitatis, apice rotundatis, filiformi-paraphysatis, $110-120 \approx 10-11$, octosporis; sporidiis monostichis oblongo-ovoideis, $18-20 \approx 8-9$, 1-septatis, brevissime constrictis, nubiloso-guttulatis, hyalinis, loculo superiore sæpe paullulo crassiore.
Hab. in caulibus morientibus v. emortuis *Polygoni sachalinensis*, Rigny sur Arroux, 1908 (FLAGEOLET).
17. *Didymella involucralis* (Pass.) Saccardo, Not. Myc. VI, Ann. Myc. 3852
 III (1905) p. 511, *Metasphaeria involucralis* (Pass.) Sacc. — Syll. II, p. 172. — Ex spec. orig. in Rabenh. F. Eur. 1632 sunt asci $50-55 \approx 6-8$; sporidia $12-13 \approx 3-3,2$, ex hyalino dilutissime flaveola, medio constricto-1-septata, 4-guttulata nec 3-septata, ut auctor habet; hinc *Didymellæ* nec *Metasphaeriæ* species.
18. *Didymella Maxillariæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 3853
 (1909) p. 356. — Maculis nullis sed matrice tota arescente ac subcinerescente; peritheciis innatis subglobosis, 75-100 μ . diam., epidermide velatis sed prominulis, membranaceis, atris; ascis obclavulatis $45-50 \approx 10-12$, pseudoparaphysibus crassis torulosis obvallatis; sporidiis ex ellipsoideo-fusoideis non v. leniter inaequilateralibus, medio non v. vix constrictis, 1-septatis, hyalinis, $14-15 \approx 3-4$.
Hab. ad folia *Maxillariæ* rufescentis in silvis Misiones, Rep. Argentina Amer. austr.
19. *Didymella glumicola* Spegazz., Fungi Paulist., Rev. Mus. La Plata 3854
 t. XV (1908) p. 21. — Peritheciis laxè gregariis areola diffusa albescente cinctis, epidermidem diu obtegentem perforantibus, hemisphaerico-lenticularibus 80-100 μ . diam., minute ostiolatis, membra-

naceis, glabris, atris, contextu eximie parenchymatico fuscescente; ascis antice obtusissime rotundatis crassiusculeque tunicatis, postice breviter cuneatis, modicissime pedicellatis, $55-60 \approx 10$, octosporis, paraphysibus filiformibus parum longioribus commixtis; sporidiis rectis v. leniter inæquilateralibus, superne obtusiusculis, inferne acutiusculis, $10-12 \approx 2-2,5$ primo continuis dein medio septatis, ad septum non constrictis, hyalinis.

Hab. ad glumellas submaturas *Oryzæ sativæ* circa Sao Paulo Brasiliæ (A. USTERI).

20. *Didymella arthonispora* Rehm apud Fairm., Proc. Rochester Ac. 3855 of Sc. IV (1906) p. 221. — Peritheciis sessilibus, gregariis, hemisphæricis, vix papillatis, ostiolo perspicuo pertusis, nigris, basi hyphis nonnullis brevibus, fuscis obsessis, 100μ . diam., siccis collabentibus, contextu parenchymatico fuscidulo; ascis oblongis, apice rotundatis, sessilibus, $35 \approx 15$, octosporis; sporidiis subclavatis, medio septatis, vix constrictis, hyalinis, $18-20 \approx 6-7$, distichis, grosse 2-guttatis, cellula superiore latiore.

Hab. ad corticem arboris indeterminatæ dejectæ in silvis Lyndonville Amer. bor. — *D. Stenocarpi* proxima videtur.

21. *Didymella Lettauiana* von Keissler, Centralbl. für Bakter. etc. 3856 II Abt. (1910) p. 211, fig. 2. — Peritheciis dispersis compresso-disciformibus, magnis, superficialibus, nigris, sub microscopio brunneo-nigris, ostiolo subpapillato præditis, carbonaceis, $400-500 \mu$. d.; ascis cylindræis, distincte stipitatis (in aqua turgescens et demum subsessilibus evadentibus) rectis v. curvulis, tenuiter tunicatis, 8-sporis, $110 \approx 25$, paraphysibus distincte filiformibus, demum probabiliter confluentibus; sporidiis subcuneiformibus, 1-septatis, loculo superiore subgloboso, inferiore tenuiore oblongo vel duplo longiore, hyalinis v. chlorino-hyalinis, subdistichis, $18-22 \approx 7-8$.

Hab. in thallo tenuissimo vix visibili lichenoso (*Catillariæ chalybææ*?) ad lapidem in M. Flossberg pr. Ilmenau Thuringiæ (Doct. G. LETTAU). — An *Pharcidiæ* sp. observante auctore?

22. *Didymella Coarctatæ* Bouly de Lesdain, Bull. Soc. bot. France 3857 LIV [1907] 1908, p. 695. — Peritheciis minutis, nigris, levibus, parte tertia inferiori substrato infossis; ascis clavatis aparaphysatis; sporidiis octonis, 1-septatis, $12-21 \approx 4-6$.

Hab. in thallo *Lecidæ coarctatæ* pr. Versailles Galliæ.

— Gelatina hymenialis jodi ope flavescit.

23. *Didymella darluciphila* Speg., An. Mus. Nac. Buenos Aires t. XIX 3858 (1909) p. 357, cum icon. — *Amphigena*, hinc inde dense aggre-

gata, 0,5-2 mm. long., 250-500 μ . lat.; peritheciis dense constipatis e lenticulari conoideis, 100-130 μ . diam., minute papillulato-ostiolatis, nigris, glabris; ascis e cylindraceo lenissime subfusoides v. subclavulatis, 50-75 \times 8-10, paraphysibus filiformibus vix longioribus parvis obvallatis; sporidiis e fusoides clavulatis, subcurvulis, 12-18 \times 3 medio 1-septatis, hyalinis, biguttulatis v. non.

Hab. ad glomerulos *Darluce* australis in foliis aridis *Andropogonis condensati* a *Puccinia andropogonicola* infectis, prope Posadas nec non prope Basavilbaso Rep. Argentina Americae austr. — An status ascophorus *Darluce australis*?

24. *Didymella sphinctrinoides* (Zwackh) Berl. et Vogl. — Syll. IX, 3859 p. 671. — var. *Verrucariæ* Zopf, Paras. Pilze der Flecht. p. 176, f. 68 (1897). — Peritheciis breviter piriformi-ellipsoideis, minutissimis, nigris, sparsis; ascis cylindraceis, 12-13 μ . cr., jodo non coloratis, copiose ramoso-paraphysatis, 4-6-sporis; sporidiis bicellularibus, 2-guttatis, oblongis, utrinque rotundatis, loculo sup. paullo crassiore, hyalinis, 18-20 \times 7-8.

Hab. in thallo *Verrucariæ pachydermæ*, St. Anton am Arlberg Bavariæ. — Var. *aspiciliicola* Zopf, l. c., pag. 176-178, fig. 69-72: a *Did. sphinctrinoides* differt ascis potius ovato-oblongis, nec cylindricis, multo parcius paraphysatis; sporidiis paullo angustioribus, leviter curvis, 18-21 \times 6,5-7,5. — In thallo *Aspiciliæ lævatae* v. *albicantis*, St. Anton am Arlberg Bavariæ.

MASSARINULA Gen. de Lamarl. — Syll. XIV p. 356, XVI p. 483, XVII p. 658.

1. *Massarinula chilensis* Speg., Fungi Chilenses (1910) p. 61, cum 3860 icon. — Peritheciis sparsis cortice innatis, epidermide velatis, lenticularibus, coriaceis, nigris, 300-350 μ . diam.; ascis clavulatis breviter crasseque pedicellatis, paraphysatis, 300 \times 60, octosporis; sporidiis ellipsoideo-biconicis, loculo infero vix minore, primo strato mucoso crasso obovolutis dein nudis, 60-65 \times 20-22, hyalinis.

Hab. in ramis emortuis dejectis *Boldoe* fragrantis prope Talcahuano, Chile Amer. austr.

APIOSPORA Sacc. — Syll. I p. 539, IX p. 659, XI p. 301, XIV p. 534, XVI p. 477, XVII p. 658.

1. *Apiospora Yerbæ* Speg., An. Mus. Nac. Buenos Aires t. XVII 3861 (1908) p. 121. — Corticola, subepidermica, laxe gregaria; perithe-

ciis minutis, 150 μ . diam., subcarbonaceis, glabris, lenticulari-hemisphaericis; ostiolo minuto carbonaceo; ascis cylindraceis breviter pedicellatis, aparaphysatis, apice truncato-rotundatis, 100-120 \times 8-10; contextu indistincto; sporidiis ovoideis bicellularibus, loculo inferiore, seu cauda, triplo minore, hyalinis, monostichis, 14 \times 5-6, prima ætate tunica mucosa tenui obvolutis; loculo sup. 2 guttato, infero uniguttulato.

Hab. ad ramulos languidos v. emortuos *Ilicis paraguayensis* (vulgo *Yerba*) Misiones Argentinae.

2. *Apiospora controversa* Starb., Ascom. Schwed. Chaco-Cordill.-Exp., 3862 Arkiv f. Bot. Bd. V (1905) p. 22, fig. 17 a-c. — Peritheciis densiuscule confertis, rarius nonnullis confluentibus, maculas irregulares formantibus, primitus epidermide plane tectis, denique poro pertuso erumpentibus, lenticularibus, atratis, c. 200-250 μ . diam.; ascis octosporis, oblongatis vel late fusoideis, interdum clavulatis, superne obtusis, fere sessilibus, 65-70 \times 19-20; sporidiis distichis vel inordinatim conglobatis, plerumque ovoideo-piriformibus, rarissime ellipsoideis vel ellipsoideo-oblongatis, ad apicem angustiorum septatis, cellula majore globuloidea, minore conica, sepimento sæpissime supra, interdum infra medium sito, endoplasmate grumoso, hyalinis, 15-19 \times 7,5-9; cellula globulosa, 9-11,5 \times 5-7; paraphysibus numerosis, filiformibus, ramosis, guttulatis, hyalinis.

Hab. in foliis vivis paullulum flavido-decoloratis *Pithecolobii* sp. ad Gran Chaco Boliviae. — Nulli speciei adhuc descriptæ affinis videtur; præsertim sporidiis peculiariter septatis prædistincta.

3. *Apiospora myrtincola* Rehm, Ann. Mycol. V (1907) pag. 528. — 3863 Peritheciis dispersis, cortice dealbato primitus tectis, dein semiglobosis, prominentibus, atris, minutissime papillulatis, globosis, contextu parenchymatico fusco, 0,1-0,15 mm. diam.; ascis clavatis, apice rotundatis, crasse tunicatis, 60-65 \times 10-12, 8-sporis; sporidiis ovoideis, infra medium septatis, haud constrictis, hyalinis, 12 \times 5-6, in superiore asci parte 2- infra 1-stichis; paraphysibus filiformibus, 1,5 μ . cr., hyalinis.

Hab. in ramulo Myrtaceæ, *Ipamanga* pr. Sao Paulo Brasiliæ (USTERI). — Affinis *Ap. Rosenvingei* betulicolæ, sed sporidia paullo minora.

4. *Apiospora luzonensis* P. Henn., Hedwigia XLVII (1908) p. 256. 3864 Peritheciis gregariis parallele seriatis, immersis culmique superficiem elevantibus erumpentibusque, subglobosis, atris, 200 μ . circ.

diam.; ascis clavatis, obtuse rotundatis, 8-sporis, $90-100 \approx 20-24$; sporidiis subdistichis, oblonge clavatis, incurvo-attenuatis, $20-24 \approx 8-10$, hyalinis, tunicatis, prope basim 1-septatis, subconstrictis.

Hab. in culmis emortuis *Bambusæ* sp., Luzon, prov. Bataan Ins. Philipp. (MERRILL).

5. *Apiospora chilensis* Speg., Fungi Chilenses (1910) pag. 36, cum 3865 icon. — Linearis nigra erumpens; peritheciis dense 1-5 mm. seriatis, globosis, minutis, $200-250 \mu$. diam.; ascis subclavatis aparaphysatis, $110-125 \approx 20-22$, octosporis; sporidiis elongato-subnavigularibus, majusculis, $36-38 \approx 10-11$, cellula appendiculari minima, hyalinis.

Hab. in culmis siccis *Chusqueæ* Cumingii, Corral, Valdivia, Concepcion, Valparaiso, Chile Amer. austr. — Verisimiliter *Sphæria apiospora* huc pertinet sed descriptio Montagnei incerta.

MELANOPSAMMA Niessl — Syll. I p. 575, IX p. 682, XI p. 303, XIV p. 539, XVI p. 486, XVII p. 658.

1. *Melanopsamma Yerbæ* Speg., An. Mus. Nac. Buenos Aires t. XVII 3866 (1908) p. 121. — Peritheciis ligno dealbato-subinfuscato immersis, sparsis v. laxè gregariis, parte supera v. ostiolo papillulato, perforato tantum exertis, subglobosis, 200μ . diam.; ascis clavulatis, filiformi-paraphysatis, apice obtusis, $80 \approx 10$, brevissime noduloso-pedicellatis; sporidiis fusoides leniter arcuatulis, utrinque acutiusculis, medio uniseptatis vix constrictis, hyalinis, $25-26 \approx 4$, distichis, loculis conoideis, minutissime biguttulatis.

Hab. ad truncos emortuos cariosos *Ilicis* paraguariensis (*Yerba*), San Pedro, Misiones Argentinae.

2. *Melanopsamma* (*Hypopsamma*) *Ribis* Chenant. in Bull. Soc. Sc. 3867 nat. Ouest France (1910) p. 13, t. IV, f. 2. — Stromate irregulariter ellipsoideo nigrescente, ostiolis vix conspicuis muricatis, demum elongatis acutis, crassis aggregatis v. subsparsis punctato; peritheciis sphaeroideis, minutis, semper immersis, circ. $150-200 \mu$. diam.; ascis aparaphysatis, cylindraceis, utrinque attenuatis, $110-135 \mu$. longis, apice bifoveolatis; sporidiis ovatis oblongisve, recte v. oblique monostichis, hyalinis, 1-septatis, 2- v. pluriguttulatis, dein 2-3-septatis, non constrictis, hyalinis, loculis 2-guttulatis, $10-20 \mu$. long. et (ex icone) $6-10 \mu$. cr.

Hab. in ramis *Ribis* *Uvæ-crispæ*, Bagatelle, Monterelaxo Gallie. — Cum gen. *Melanopsamma* nil commune habet; auctor vero in litt. nuperius ut formam anomalam *Eutypæ* censet a quo

genere et ascis bifoveolatis et sporidiis ovatis septatis abhorret. Diagnosim retulimus sed verisimiliter de re miscellanea agitur.

3. *Melanopsamma Jaapiana* Kirschst., in Jaap Abh. bot. Ver. Prov. 3868
Brandenb. LII (1910) p. 138. — (Nomen nudum).

Hab. ad caudices vetustos Alni pro Triglitz in Germania.

4. *Melanopsamma herpotrichoides* Kirschst., Verh. bot. Ver. Bran- 3869
denb. XLVIII (1906) p. 49. — Peritheciis dense confertis, subiculo
brunneo (raro nullo) insertis, nigris, piriformibus, 200 μ . diam.,
tenui-membranaceis, in ostiolum breve nitidum productis; ascis
cylindraceutis, sessilibus, tenuibus, apice truncatis, 80-90 \approx 3-4, octo-
sporis; sporidiis longe 1-seriatis, bicellularibus, hyalinis v. dilu-
tissime viridulis, ellipsoideis, utrinque tenuato-rotundatis, ad se-
ptum plus minus constrictis, 2-4-guttulatis, 7-10 \approx 3; paraphysibus
hyalinis filiformibus, ramosis.

Hab. in interiore corticis putridi Betulæ dejecti, Rathenower
Stadtforst Borussiae.

5. *Melanopsamma valdiviensis* Speg., Fungi Chilenses (1910) p. 59. — 3870
Maculis nullis; peritheciis sparsis v. laxe gregariis ad medium
usque ligno denudato infossis, ostiolo umboniformi crasso quan-
doque subcompresso ornatis, carbonaceis, atris, glabris, 150-200 μ .
diam.; ascis subcylindraceutis brevissime pedicellatis, densissime pa-
raphysatis, 100-110 \approx 15-18; sporidiis fusoides submajusculis primo
grosse 6-guttulatis serius medio 1-septatis, constrictulis, hyalinis
v. subchlorinis, 40-45 \approx 7-8.

Hab. ad truncos decorticatos Perseæ Lingue prope Ciudad
de Valdivia, Chile Amer. austr.

6. *Melanopsamma nitida* Kirschst., Verh. bot. Ver. Brandenb. XLVIII 3871
(1906) p. 50. — Peritheciis dense gregariis, nitidis, nigris, globo-
sis, glabris, perexiguis, oculo inermi vix conspicuis, tenuibus, fra-
gilibus, papilla brevi obscuriore præditis; ascis cylindraceutis v. te-
reti-clavatis, apice rotundatis, vix pedicellatis, octosporis, 50-60 \approx
3-4; sporidiis oblongis, subclavatis, hyalinis, bicellularibus, intus
vacuis, 1-2-stichis, 6-8 \approx 2; paraphysibus paucis, filiformibus, hya-
linis, ascos multo superantibus.

Hab. ad caudices putres Pini silvestris, Rathenower Stadt-
forst Borussiae.

7. *Melanopsamma hypoxylodes* v. Höhn., Fragm. z. Mykol. III, Sitzb. 3872
k. Ak. d. Wissensch. Wien Bd. CXVI, Abt. I (1907) p. 121. —
Peritheciis areis ligni nigricantibus insertis, superficialibus, pro
more crebro gregariis, hemisphaericis v. ovoideo-globosis, lata basi

adnatis, glabris, nigris, carbonaceis, nitidis, papilla nitidula v. obsoleta, sæpe leviter concentrice sulcatulis, 900-1000 μ . diam.; ascis cylindraceis, paraphysibus copiosis excedentibus, 1 μ . cr. obvallatis, apice crassiusculis et rotundatis, in stipitem longiusculum sensim tenuatis, octosporis, 150-160 \approx 6-7; sporidiis bicellularibus, hyalinis, fusoideis, utrinque acutis, medio non constrictis, rectis, 18-32 \approx 3-3,5, plerumque 20-24 \approx 3, distichis.

Hab. in ligno putrescenti in insulis Samoa Polynesiæ (RECHINGER). — *Habitus* quasi *Hypoxylæ*.

8. *Melanopsamma chilensis* Speg., Fungi Chilenses (1910) pag. 58, 3873 cum icon. — Peritheciis matrici denudata cinerescenti sparsis, sub-superficialibus, udis globosis, siccis cupulato-collabescentibus, sub-corneis, parvis, nigris, glabris, 250-400 μ . diam.; ascis cylindraceis brevissime pedicellatis denseque paraphysatis, 100-110 \approx 10-12, octosporis; sporidiis oblique monostichis ellipsoideo-biconicis, 1-septatis, constrictis, hyalinis, mediocribus, 20 \approx 8-9.

Hab. in ramis emortuis et siccis Proustiae pungentis, in colles prope Batuco Chile Amer. austr.

ERIOSPHÆRIA Sacc. — Syll. I p. 597, IX p. 696, XI p. 307, XVI p. 490, XVII p. 659.

1. *Eriosphæria erysiphoides* Rehm, Contr. myc. Fl. Hung., Novenyt. 3874 Közlemén. (1905) p. 1. — Peritheciis gregariis, maculas nigras formantibus, sessilibus, globosis, poro haud conspicuo pertusis, fusciculis, siccis nigris; contextu parenchymatico fusco, setis plurimis rectis, acutis, fuscis, 45 \approx 4-5, obsessis, 90-120 μ . diam.; ascis fusi-formibus, sessilibus, 30 \approx 4, 8-sporis oblongis, utrinque obtusis, rectis vel curvatulis, medio septatis, utraque cellula 1-guttulata, hyalinis, 7-9 \approx 1,5, distichis; paraphysibus nullis.

Hab. in ligno Populi, Berencsfalu, prope Selmeczbánya Hungariæ (KMET). — *Sphæria exili* Alb. et Schw. similis, quæ autem quoad ascos et sporidia plane ignota et quæ, teste Schröt., non est *Cælosphæria exilis* (Fuck.) Sacc.

KIRSCHSTEINIA Syd. Ann. Mycol. IV (1906) p. 455 (Etym. a el. W. KIRSCHSTEIN, mycologo borussico), *Bertiella* Kirschst., Verh. Bot. Ver. Brandenb. XLVIII (1906) p. 51, non Sacc. — Perithecia discreta, superficialia, glabra, carbonacea, ovoideo-globosa, ostiolo brevi crasso. Asci fusoideo-clavati, polyspori, aparamphysati. Spo-

ridia ellipsoideo-oblonga, 2-4-guttulata, dein 1-septata, hyalina. — A genere *Bertia* præceteris ascis polysporis distinguitur.

1. *Kirschsteinia polyspora* (Kirschst.) Syd. l. c., *Bertiella polyspora* 3875
Kirschst., l. c. p. 51, cum icon. — Peritheciis superficialibus, nigris, rugosis, glabris, globoso-ovoideis, obtuse papillatis, $\frac{1}{4}$ - $\frac{1}{3}$ mm. cr., basi adnatis, hyphulisque brunneis septatis cinctis; ascis fusideo-clavatis, subsessilibus, $90 \approx 20$, polysporis; sporidiis ellipsoideo-oblongis, rectis v. curvulis, hyalinis, 2-4-guttulatis, dein 1-septatis, non constrictis, $9-12 \approx 2-3$; paraphysibus nullis.

Hab. in ramis decorticatis putrescentibus quercinis, Rathe-nower Stadtforst Borussiae.

VALETONIELLA v. Höhn. Fragm. Myk. IX (1909) p. 39 (Etym. a cl. THEOD. VALETON herbarii Buitenzorgensis direttore). — Perithecia superficialia, membranacea, nigricantia, ostiolo circumcirca setis apice ramosis ornato. Asci non v. obsolete paraphysati, octospori. Sporidia oblonga, hyalina, demum bicellularia. — Ab *Eriosphaeria* imprimis setis apice ramosis dignoscendum genus.

1. *Valetoniella crucipila* v. Höhn. l. c. p. 40. — Peritheciis gregariis, 3876 subglobosis, $180-220 \mu$. diam., papillatis, papilla obscuriore $50-70 \approx 30-35$, ostiolo $8-10 \mu$. diam.; contextu e cellulis polygoniis, $12-16 \mu$. diam., atro-brunneis formato; setulis $15-20$, rigidulis, continuis, atro-brunneis, $44-70 \approx 6-8$, prope apicem in ramos subquaternos, 8μ . cr., patentes divisas; ascis obsolete paraphysatis, clavatis, teneris, $30-36 \approx 7-9$; sporidiis distichis, ellipsoideo-oblongis, ad septum non constrictis, $8-9 \approx 3$, rarius $13 \approx 4$, tunica interdum leviter longitrorsum 3-4-striatula.

Hab. ad corticem Albizziae moluccanae (?) in horto botanico Buitenzorg Javae.

LIZONIELLA P. Henn. — Syll. XVII p. 661.

1. *Lizoniella Cupaniae* (Rehm) Sacc. et Trott., *Lizonia Cupaniae* Rehm, 3877
Ann. Mycol. V (1907) p. 527. — Maculis nullis; peritheciis hypophyllis, in soros orbiculares $2,5$ mm. diam., centro sæpe nudis et albidulis arcte congregatis, sessilibus, globulosis, vix papillulatis, poro pertusis; contextu parenchymatico membranaceo, glabris, fuscis, $90-100 \mu$. diam.; ascis fusiformibus, sessilibus, $60 \approx 12$, apice rotundatis, 8-sporis; sporidiis fusiformibus, utrinque subrotundatis, rectis medio septatis, haud constrictis, hyalinis, $25 \approx 3,5-4$, 2-3-stichis; paraphysibus 3μ . cr., septatis, hyalinis.

Hab. ad folia Cupaniæ, Sao Leopoldo, Rio Grande do Sul Brasilæ (RICK S. J.).

2. *Lizoniella leguminis* (Rehm) Sacc. et Trott., *Lizonia leguminis* 3878
Rehm in Broteria V (1906) p. 226. — Peritheciis late arctique congestis, sessilibus, globulosis, poro minutissimo pertusis, atris, glabris, 200 μ . diam., contextu parenchymatico fusco, membranaceo; ascis fusiformibus, 40-42 \times 10, tetrasporis, apapophysatis; sporidiis oblongo-fusoideis, utrinque rotundatis, medio septatis, vix constrictis, hyalinis, 18 \times 3-4, distichis.

Hab. in superficie externa leguminis speciei indet. in Brasilia.
— *Liz. Uleanæ* proxima videtur.

3. *Lizoniella Syzygii* (Rac.) Sacc. et Trott., *Lizonia Syzygii* Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 387. — Maculis hypophyllis, sparsis, subrotundis, nigricantibus 2-3,5 mm. lat., stromatoideis; peritheciis globulosis minutissimis, nigris, concentrice dense seriatis, basi lata sessilibus, hyphis mycelicis penetrantibus, brevi-cellularibus, brunneis basi auctis, globosis, 120 μ . diam., ostiolo impresso, minuto; ascis apapophysatis, tereti-clavatis, 68-82 \times 16, octosporis; sporidiis breve fusoideis, 30 \times 4-5, rectis, levibus, utrinque acutis, hyalinis, medio non constrictis, bicellularibus.

Hab. in foliis Syzygii sp., Salak et Megamendong pr. Buitenzorg Java.

4. *Lizoniella fructigena* Syd., Ann. Mycol. V (1907) p. 357. — Peritheciis in superficie fructuum dense dispositis et sæpe eos omnino obtegentibus, erumpenti-superficialibus, atris, subglobosis, rugulosis, vel papillatis, ca. 125-200 μ . diam., contextu parenchymatico olivaceo-fusco; ascis cylindraceis, sessilibus, rectis vel sæpius curvulis, 65-90 \times 8-14, octosporis; sporidiis monostichis, ovatis v. ellipsoideis, utrinque rotundatis, medio 1-septatis, non constrictis, hyalinis, 11-18 \times 7-9.

Hab. ad fructus Eugeniæ spec. Prov. Sao Paulo, Sao Francisco dos Campos Brasilæ.

5. *Lizoniella Uleana* (Sacc. et Syd.) Sacc. et Trott. *Lizonia Uleana* 3881
Sacc. et Syd. — Syll. XVI, p. 485. — Var. *Tournefortiæ* Rehm, Ann. Mycol. V (1907) p. 528. — Peritheciis 2-20 dense confertis, in maculis orbicularibus, dilute ochraceis, 0,5 mm. diam. insidentibus; ascis parte superiore ovalibus vel clavatis, rotundatis, plerumque in stipitem brevem contractis; sporidiis oblongis, utrinque rotundatis, medio septatis et subconstrictis, guttulis minutissimis

repletis, hyalinis; paraphysibus interdum dichotomis, septatis, 1,5 μ ., ad apicem usque 2 μ . latis.

Hab. in foliis vivis Tournefortiæ, Villa Marianna, Sao Paulo Brasilæ (USTERT).

6. *Lizoniella stromatica* (Rehm) Sacc. et Trott. *Lizonia stromatica* 3882
Rehm, Ann. Mycol. VI (1908) p. 323. — Peritheciis in pagina superiore foliorum primitus gregarie innatis, dein in maculis circumscriptas aterrimas, suborbiculares, 3-4 mm. diam. arcissime congregatis, prominentibus, sphæroideis, poro pertusis, crasse subcarbonaceis, 60-70 μ . diam.; ascis fusiformi-clavatis, 60-65 \times 12, octosporis; sporidiis linearibus, rectis, utrinque obtusis, medio septatis, haud constrictis, utraque cellula prope septum 1-guttulata, hyalinis, 2-3-seriatis, 25-30 \times 4-4,5; paraphysibus nullis.

Hab. in foliis emortuis Saxifragæ? in Alpe Arlbergensi Algoviæ (C. ARNOLD). — Habitus hinc *Sphaerellæ*, illinc *Euryachoræ*.

7. *Lizoniella Ætoxici* (Speg.) Sacc. et Trott., *Lizonia Ætoxici* Speg., 3883
Fungi Chilenses (1910) p. 59, cum icon. — Maculis nullis; peritheciis innato-superficialibus lenticularibus parvis, atris, nitidulis, coriaceis, astomis (?), 200-250 μ . diam.; ascis subcylindræis brevissime pedicellatis subparaphysatis, 65-75 \times 7-8, octosporis; sporidiis oblanceolatis v. cylindræo-subnavicularibus, medio 1-septatis hyalinis subsparis, 14-16 \times 2,5, monostichis v. distichis.

Hab. ad folia dejecta subputrescentia Ætoxici punctati, Cerro Caracol de Concepcion, Chile Amer. austr.

8. *Lizoniella Hypnorum* (Ferd. et Winge) Sacc. et Trott., *Lizonia* 3884
Hypnorum Ferdinands. et Winge, Bot. Tidsskr. XXVIII (1907) p. 254, f. 3. — Peritheciis epiphyllis, globosis, subastomis v. apice truncato-conoideis, hyphis a basi prodeuntibus, fuligineis 2,5-4 μ . cr., in folio repentibus affixis, 50-60 μ . diam., nigris; ascis rhomboideo-saccatis v. crasse clavatis, versiformibus, 37-44 \times 12-18, tetra-octosporis; sporidiis ovato-ellipsoideis, 1-septatis, sæpe inæquilateralibus loculoque superiori majori, 11-16 \times 5-6,5, hyalinis.

Hab. ad folia viva Hypni (Stereodontis) cupressiformis prope Borry Jutlandiæ.

OTTHIELLA Sacc. — Syll. I p. 739, XVI p. 1135, XVII p. 662.

1. *Otthiella collabens* Speg., An. Mus. Nac. Buenos Aires t. XIX 3885
(1909) p. 358. — Maculis nullis; peritheciis parvulis 100-150 μ . diam., dense constipatis, subpedicellatis, in sicco cupulato-collabescentibus, atris, glabris; ascis e cylindræo subclavulatis, 60 \times 8-

10. paraphysatis, octosporis; sporidiis subellipsoideis 1-septatis hyalinis 12-14 \times 5-6, loculis subæquilongis sæpius minute biguttulatis.

Hab. in disco ramorum excæsorum Pruni armeniæ in hortis prope Tucuman Rep. Argentina Amer. austr.

2. *Otthiella Schiffneri* v. Höhnelt, *Ergeb. Bot. Exp. Südbras.* 1901, 3886
Denk. k. Ak. d. Wiss. Wien Bd. LXXXIII (1907) pag. 25. — Peritheciis coriaceo-carbonaceis, asperulis, pachydermicis, ovoideis, 250-350 μ . diam, basi stipitiformi 400-450 \times 250-300 suffultis, stromateque irregulariter verruciformi carbonaceo erumpenti-superficiali confertim insertis, soros 2-4, aut ad foliorum nervos usque ad 10 mm. long. formantibus; ascis filiformi-paraphysatis, sessilibus, clavatis, 70-90 \times 9-10, octosporis; sporidiis subdistichis, hyalinis, bicellularibus, fusoideis, rectiusculis, rarius curvulis, utrinque acutis, medio non constrictis, tenuiter tunicatis, 22-25 \times 5-5,5.

Hab. in pag. inf. foliorum arboris ignotæ, pr. Sao Paulo Brasiliæ (SCHIFFNER).

3. *Otthiella Fairmani* Saccardo, *Microm. Amer. Novi, Journ. of Mycol. v. XII* (1906) pag. 48. — Peritheciis in acervulos minutos, suborbiculares, 1 mm. diam., erumpenti-superficialibus, in quoque acervulo paucis (5-7), globosis, subinde paullulum connatis, non v. obtuse papillatis, nigris, glabris, 400 μ . diam.; ascis tereti-elongatis, utrinque tenuatis, subsessilibus, 110-130 \times 13-15, octosporis; paraphysibus filiformibus, copiosis; sporidiis distichis, oblongo-fusoideis, curvulis, utrinque acutulis, medio septatis et denique constrictulis, 30-32 \times 5,5-6, hyalinis v. dilutissime ochraceis, articulo super. sæpe paullo crassiore.

Hab. ad cortices dejectos in silvis pr. Lyndonville, New York Amer. bor. (FAIRMAN). — A ceteris generis speciebus omnino diversa.

GIBBERA Fr. — *Syll. I* p. 599, *IX* p. 306, *XIV* p. 542, *XVI* p. 491, *XVII* p. 813.

1. *Gibbera riograndensis* Rehm, *Broteria V* (1906) p. 226. — Peritheciis in greges superficiales 2-10 mm. latos, effusos arcte confertis, globulosis, papillula minutissima demum pertusa, nigro-fusculis, submembranaceis, 0,3-0,5 mm. diam., imprimis basi hyphis longis simplicibus, septatis, fuscis, 3-6 μ . cr., vestitis usque stromatice coacervatis; ascis clavatis, apice rotundatis, 100 \times 10, octosporis; sporidiis subclavatis, utrinque obtusis, rectis, 2-cellularibus, cellula superiore interdum brevior, ad septum non con-

strictis, dilute fuscidulis, 18-20 \times 5, distichis; paraphysibus filiformibus 2 μ . cr.

Hab. ad corticem, Rio Grande do Sul Brasilie (J. RICK).

Sect. 5. Phæodidymæ.

PHÆOSPHERELLA Karst. — Syll. IX p. 723, XI p. 312, XVI p. 498, XVII p. 675.

1. **Phæosphærella scirpicola** Earle, Bull. of the N. York Bot. Gard. 3889 (1904) p. 293. — Peritheciis sparsis, epiphyllis, subsuperficialibus, minutis, nigris, membranaceis, 250 μ . diam.; ascis ellipsoideis, 40-50 \times 18, aparaphysatis; sporidiis fasciculatis, cylindraceis, medio 1-septatis, non constrictis, initio hyalinis, dein brunneis, 30-35 \times 4, loculis 4-guttulatis.

Hab. in foliis arescendo dealbatis Scirpi sp. pr. Stanford University, California (C. F. BAKER).

2. **Phæosphærella? donacicola** Speg., An. Mus. Nac. Buenos Aires 3890 t. XIX (1909) p. 370. — Matricem totam sordide infuscans; peritheciis minutis epidermide velatis confertis vix papillulato-ostiolatis, ex hemisphærico lenticularibus 150-180 μ . diam.; ascis cylindraceis aparaphysatis, octosporis 55-60 \times 4-5; sporidiis rectis v. oblique monostichis elongato-ellipsoideis, 8-10 \times 3-3.5, medio septato-constrictulis, pallide fusco-olivaceis, loculis subæqualibus, 1-guttulatis.

Hab. ad culmos putrescentes Arundinis Donacis, Lezama prope Buenos Aires Rep. Argentina Amer. austr.

3. **Phæosphærella alpestris** (Friederich) Sacc. et Trott. *Sphaerothecium* 3891 *alpestre* Friederich, Beitr. zur Anat. d. Silikatflechten Jnaug.-Dissert., Stuttgart (1904) pag. 31. — Mycelio epiphytico effuso e cellulis amplis globosis brunneis formato, copioso et irregulariter ramoso; peritheciis rarioribus, globosis, extus brunneis, contextu tenui; ascis paucis jodi ope immutatis, octosporis; sporidiis ellipsoideis, 1-septatis, non constrictis, brunneis, 10 \times 7.

Hab. in thallo Usneæ nec non in cortice propinquo Pini Cembræ, Karrerpass Tirolie.

4. **Phæosphærella Senniana** Sacc., in Ann. Mycol. XII (1910) p. 337. 3892 — Peritheciis plerumque epiphyllis, nunc maculas subcirculares brunneolas occupantibus, nunc æque orbiformiter dispositis sed sine maculis, sæpius circinato-gregariis, punctiformibus perexiguis, 60-

90 μ . diam., lenticularibus, prominulis, nigris, calvis, ostiolo sub-circulari, 12-14 μ . diam. pertusis; contextu obsolete parenchymatico, fulgineo; subiculo omnino nullo; ascis aparaphysatis, oblongo-fusoides, utrinque obtusis, subsessilibus, 28-30 \times 8,5-10, octosporis; sporidiis distichis, oblongis, utrinque præcipue apice obtusis, medio 1-septatis, non constrictis, 11-12 \times 4-4,5, atro-olivaceis.

Hab. in foliis morientibus *Protææ abyssinicæ*, Addi Nefas Erythrææ (Legit LAUR. SENNI, dedit prof. J. H. MATTEI).

TICHOTHECIUM Flot. — Syll. IX p. 723, XIV p. 551, XVI p. 498, XVII p. 676.

1. **Tichothecium Latzelii** Keissl., Oesterr. botan. Zeitschr. (1909) p. 277. 3898
— Peritheciis immersis, apice rotundato ostiolato prominulis, depressoglobosis, atris, parvis, c. 200-300 μ . diam.; ascis cylindricoclavatis, non stipitatis, 8-sporis, c. 45-55 \times 12-15, paraphysibus nullis; sporidiis fusiformibus rectis, uniseptatis, brunneolis, 2-4-guttulatis, oblique 2-seriatis, c. 12-15 \times 6.

Hab. in thallo *Collematis pulposi* prope Forte Lorenzo ad Ragusam Dalmatiæ (A. LATZEL). — Hymenium jodi ope immutatum.

2. **Tichothecium collemarium** (Linds.) Zopf in Hedw. (1896) p. 324, 3894
Microthelia collemaria Linds. Lichenicol. Micro-fungi, pag. 555, t. XXIV, f. 22. — Peritheciis minutis, nigris; ascis saccato-clavatis, apice rotundatis basi breviter tenuatis, copiose filiformi-paraphysatis, 90-100 \times 30-40, polysporis; sporidiis conglobato-poly-stichis, oblongo-ellipsoideis 1-septatis, non constrictis, utrinque rotundatis, loculis æqualibus, brunneis, 10-12 \times 5-5,5.

Hab. in thallo *Collematis muscicoli*, Cleveland, Yorkshire Britannicæ (MUDD) et *Collematis melæni*, Otago in Nova Zelandia (LINDSAY).

3. **Tichothecium stigma** Körb. — Syll. IX, p. 724. — Var. *obtusisporum* Bagl. et Carestia, in Atti Soc. crittog. ital. II (1879) p. 354, tab. 5, f. 80. — Ascis late clavatis, octosporis; sporidiis minoribus, ellipsoideis, utrinque sat obtusatis, bilocularibus, fuscescentibus, 12-13 \times 6.

Hab. in thallo *Opegraphæ zonatæ* al *Sacco* Riva Valsesia Ital. bor. (Ab. CARESTIA).

DIDYMOSPHERIA Fuck. — Syll. I p. 701, IX p. 728, XI p. 312, XIV p. 551, XVI p. 498, XVII p. 676.

1. *Didymosphæria Fumanæ* Hollós, Ann. Mus. Nat. Hung. V (1907) 3896 pag. 455. — Peritheciis gregariis, superficialibus, globosis nigris, 180-220 μ . diam., ostiolo conicis; ascis clavatis, apice rotundatis, breve stipitatis, 8-sporis, 64-74 \approx 14-18; paraphysibus filiformibus septatis; sporidiis distichis, oblongis, medio 1-septatis, constrictis, pluriguttulatis, olivaceis, 20-24 \approx 7-8.

Hab. in ramulis decorticatis *Helianthemum Fumanæ* prope Kecskemét Hungariæ.

2. *Didymosphæria araucana* (Speg.) Sacc. et Trott., *Microthelia araucana* Speg., Fungi Chilenses (1910) p. 71. — Peritheciis sparsis minutis lenticularibus, cortice innatis epidermide clypeatim nigricata tectis, subcarbonaceis, 200-250 μ . diam., ostiolo vix prominenti; ascis cylindraceis modice pedicellatis densissime paraphysatis, octosporis, 110-120 \approx 12-14; sporidiis ellipsoideis, fuliginis, medio 1-septatis, non vel vix constrictulis, utrinque obtusis, 16-18 \approx 8-9.

Hab. in ramis siccis *Rubi sancti*, Bahia de Corral, Chile Amer. austr.

3. *Didymosphæria ludens* (Schulz.) Sacc. et Trav. — Syll. XIX p. 599 3898 — *Sphæria ludens* Schulz. v. Mügg., in Verh. zool.-bot. Gesell. Wien (1871) p. 1253, t. XIII, f. 34. — Peritheciis gregariis, sub-superficialibus globoso-depressis, epapillatis, nigris; ascis cylindraceis apice rotundatis, breviuscule stipitatis, paraphysibus parvis subinde ramulosis obvallatis, 8-sporis; sporidiis monostichis, crebris, ellipsoideo-oblongis, utrinque rotundatis, constricto-1-septatis, brunneis, 14 \approx 4

Hab. in ramis decorticatis *Cydoniæ vulgaris* in Hungaria.

4. *Didymosphæria ? eugenicola* Speg., Fungi Chilenses (1910) p. 68. 3899 — Peritheciis cortice innatis, epidermide tectis, sparsis v. subseriatis, subcarbonaceis, minutis, atris, ostiolo impresso pertusis, 150-180 μ . diam.; ascis e cylindraceo subclavatis, brevissime pedicellatis, parce paraphysatis, octosporis, 100-120 \approx 30; sporidiis ellipsoideo-didymis, submajusculis, opacis fuliginis, 26-34 \approx 14.

Hab. in ramulis siccis *Eugeniæ obtusæ*, Cerro Caracol de Concepcion, Chile, Amer. austr.

5. *Didymosphæria Yerbæ* Speg., An. Mus. Nac. Buenos Aires t. XVII 3900 (1908) p. 122. — Ramulicola; peritheciis minutis, sparsis, epidermide velatis, 90-100 μ . diam., coriacellis, ostiolo vix papillulato epidermidem perforante; ascis cylindraceis breviter cuneato-pedicellatis, longius paraphysatis, apice obtuse rotundatis, 50-60 \approx 5-6,

octosporis; sporidiis minutis subellipsoideis, didymis, modice constrictis, fusco-fumosis, monostichis, utrinque obtusis, $8-9 \approx 3,5-4$.

Hab. in ramulis languidis v. emortuis Ilicis paraguayensis (*Yerba Mate*) in dumetis prope Campo das Cuías, Misiones Argentinae. — Cum *D. Sellæ* non comparanda.

6. *Didymosphæria Ribis* Hazsl., Sphær. Hung. pag. 123, tab. VIII, 3901
fig. 32 (in textu ut var. *D. epidermidis*). — Peritheciis globosis, parum deplanatis, ostiolo rotundo perforatis, aggregatis, epidermidem papillatim elevantibus, demum apice perforantibus; ascis cylindricis stipitatis, stipite 4 μ . longo præditis, paraphysatis; sporidiis ovalibus, uniseriatis, $8-12 \approx 3,5-5$.

Hab. in ramis Ribis alpini in Hungaria. — A typo, teste auctore, recedit habitu, paraphysibus simplicibus et dimensionibus.

7. *Didymosphæria ? sordidissima* Speg., An. Mus. Nac. Buenos Aires 3902
t. XIX (1909) p. 371. — Peritheciis ligno late sordideque infuscato immersis, globulosis v. latere compressulis, 100–150 μ . diam., ostiolo superficiem matricis attingente, non v. vix exerto armatis; ascis cylindraceis breviuscule pedicellatis 100 \approx 6, paraphysibus filiformibus longioribus obvallatis, octosporis; sporidiis didymis ellipsoideis, $12 \approx 5$, medio 1-septato-constrictulis, fuliginéis, loculis subæquatibus sæpius grosse 1-2-guttulatis.

Hab. ad ramos decorticatos putrescentes Solani verbascifolii, Santa Catalina prope Buenos Aires Rep. Argentina Amer. austr.

8. *Didymosphæria coffeicola* Speg., An. Mus. Nac. Buen. Air. t. XIX 3903
(1909) pag. 370. — Matrice immutata; peritheciis sparsis minute innato-erumpentibus subcarbonaceis, ostiolo vix papillato coronatis, e lenticulari subhemisphæricis, 120 μ . diam.; ascis subclavulatis, 4-8-sporis, 60 \approx 8-10, paraphysibus filiformibus longioribus cinctis; sporidiis didymis, distichis, ellipsoideo-biconoideis, sæpius leniter inæquilateralibus, 10-14 \approx 3-4, medio 1-septato-constrictulis, primo hyalinis dein obscure fuliginéis, loculis subæqualibus diblatis v. grosse biguttulatis.

Hab. ad ramulos dejectos putrescentes Coffeæ arabicæ, Sao Paulo, Brasilia Amer. austr. (C. GIROLA).

9. *Didymosphæria massarioides* Sacc. et Brun. — Syll. IX, p. 729. — 3904
var. *major* Potebnia, Myc. St. in Ann. Myc. V (1907) p. 14, f. 24 (ex errore « minor ») et Trav. Soc. Nat. Univ. Kharkow XXXVIII (1907). — Peritheciis 0,7-0,8 mm. cr., collo 150 \approx 17-24; sporidiis 30-35 \approx 10-14.

Hab. in ramis siccis *Lycii barbari* socio *Camarosporio Lycii* et *Sporodesmio Lycii*, Kharkow Rossiaë. — An eadem ac *Didymosphæria Lycii* Sacc.?

10. *Didymosphæria victoriensis* Sacc., Not. Myc. VI, Ann. myc. III 3905 (1905) p. 510. — Peritheciis gregariis, subcutaneis, globulosis, nigricantibus, crassiuscule membranaceis, $\frac{1}{2}$ mm. diam., ostiolo obtuso brevissimo parce erumpenti; contextu e cellulis 8-10 μ . diam., rufo-fuligineis formato; ascis cylindraceis, breve noduloso-stipitatis, 8-sporis, apice rotundatis, 85-95 \times 15-16, paraphysibus crassiuscule filiformibus, ascos non excedentibus, parvis; sporidiis ovoideo-oblongis, distichis v. oblique monostichis, medio constricto-1-septatis, 19-22 \times 9, utrinque rotundatis, loculo sup. interdum paullo crassiore, olivaceo-fuligineis.

Hab. in caulibus emortuis *Artemisiæ camphoratæ*, Vittorio (Treviso) Ital. bor. — Affinis *D. permutatæ*, *D. pulchellæ* etc.

11. *Didymosphæria perexigua* Sacc., Notæ myc. VIII, Ann. Myc. 3906 v. IV (1906) p. 491, tab. X, fig. 2. — Peritheciis gregariis punctiformibus, lenticularibus, subcutaneis, 110-130 μ . diam., ostiolo brevissimo vix 20 μ . diam. erumpente; contextu laxo celluloso pallide fuligineo, circa ostiolum densiore, saturatiore; ascis cylindraceo-obclavatis, brevissime stipitatis, deorsum incrassatis, sursum obtuse tenuatis, 35-40 \times 7-9, octosporis; paraphysibus filiformibus inæqualibus, ascos non superantibus, guttulatis; sporidiis distichis, sursum sæpius monostichis, oblongis, utrinque rotundatis, medio 1-septatis, leviter constrictis, 10-12 \times 4-4.5, chlorinis dein olivaceis, cellula superiore paullo crassiore.

Hab. in caulibus emortuis *Scabiosæ Succisæ*, socio *Fusicladio consorte*, cujus est forte status ascophorus, Meudon Galliaë. (LUDWIG, comm. P. HARIOT).

12. *Didymosphæria ? pusilla* Speg., Fungi Chilenses (1910) p. 67. — 3907 Maculis nullis; peritheciis hypophyllis parenchymate innatis, epidermide velatis, lenticularibus, pusillis, vix prominulis, 150 μ . diam., astomis?, subcarbonaceis; ascis cylindraceis breviter pedicellatis, octosporis, paraphysatis 60-80 \times 8-9; sporidiis mono- v. distichis, fusoideis subnavicularibus, parvis, fumosis, primo continuis dein 1-septatis, non constrictis, 13-15 \times 3-4.

Hab. in foliis siccis *Guevinæ Avellanæ* in silvis prope Cerro Caracol de Concepcion, Chile Amer. austr.

13. *Didymosphæria ? Boldoæ* Speg., Fungi Chilenses (1910) p. 66. — 3908 Peritheciis sparsis v. laxe gregariis epidermide sublevata tectis

sublenticularibus minutis, coriacellis, nigris, ostiolo impresso-pertusis 150-200 μ . diam.; ascis e cylindraceo subclavulatis, aparyphatis, octosporis, 120 \approx 20-22; sporidiis elliptico- v. ovato-didymis, mediocribus, subconstrictis, subopacis, fuligineis, 24 \approx 12.

Hab. in ramis emortuis v. subputrescentibus *Boldoæ* fragrantis prope Talcahuano, Chile Amer. austr. — Ob sporidiorum stratum mucosum nullum generi *Massariellæ* non adscribenda species videtur.

14. *Didymosphæria Wallrothii* (Hepp) Sacc. et Trott., *Massariopsis* 3909

Wallrothii (Hepp) Rehm, Ann. Mycol. IV (1906) p. 270, *Pyrenula Wallrothii* Hepp., Lich. exs. n. 709 et Abbild. t. 81, f. 709, *Microthelia betulina* Lahm ap. Korb. Par. lich. p. 397, *Verrucaria micula* f. *furfuracea* Garov. Tent. dispos. lich. I, p. 79. — Peritheciis cortice innatis et maculas nigricantes gignentibus, initio punctiformibus, dein subliberis, globosis, poro pertusis; ascis octosporis; sporidiis bilocularibus utrinque rotundatis, medio constrictis, 13-23 \approx 4-7.

Hab. in cortice *Betulæ* in Helvetia (HEPP) et Germania (LAHM).

15. *Didymosphæria conoidea* Niessl — Syll. I, p. 702. — f. *conigena* 3910

Bianchi, Micol. prov. Mantova, Atti R. Ist. bot. Pavia ser. II, v. IX, p. 301. — Ascis 55-60 \approx 7-8; sporidiis medio valde constrictis, pallide fuscis, 10-12 \approx 5, paraphysibus elongatis asco longioribus.

Hab. in strobilis *Abietis* pr. Mantova Ital. bor. — Præcipue ascis brevioribus, sporidiis magis constrictis, matrice etc. a typo satis distincta. — Var. *major* Starb. Ascom. Schwed. Chaco-Cordill. Exp., Arkiv f. Bot. Bd. V (1905) p. 22. — Peritheciis plane immersis, sphæroideis, ostiolo cylindraceo-conico, rugosiusculo epidermidem perrumpentibus; ascis octosporis, cylindraceis, 82,5-90 \approx 6-7; sporidiis plerumque imbricatim monostichis, majoribus, 9-15 \approx 6-6,5; paraphysibus numerosis, filiformibus, sursum ramulosis, ramulis flexuosis vel sæpe tortuosis, hyalinis. — In caulibus emortuis, Prov. Jujuy, Quinta, pr. Laguna de la Brea, Argentina. — A typo sporidiis majoribus, a *D. conoidella* Sacc. et Berl. sporidiis monostichis, a *D. subconoidea* Bomm. Rouss. Sacc. paraphysibus non septatis diversa; forsitan specificè distinguenda.

16. *Didymosphæria Astrocaryi* v. Höhn. Fragm. z. Mykol. X (1910) 3911

p. 42. — Peritheciis laxè sparsis, epiphyllis, hypodermio innatis, globosis, sursum subdepressis, 300-360 μ . diam., ostiolo conico, so-

lido 120 μ . alto erumpentibus, contextu brunneo e cellulis polygoniis 5-8 μ . diam. conflato; ascis clavatis, apice rotundatis, 85 \approx 12, in pedicellum 15 μ . long., tenuatis, paraphysibus copiosis filiformibus una cum ascis muco immersis, octosporis; sporidiis distichis, bicellularibus, cinereo-brunneis violaceo-tinctis, non v. vix constrictis, oblongo-cylindraceis utrinque obtusis, 11-16 \approx 4-4,5.

Hab. in foliis *Astrocaryi vulgaris* in Guiana, frequens (LEPRIEUR).

17. *Didymosphæria scabrispora* v. Höhn., Fragm. z. Mykol. IX (1909) 3912 p. 41. — Peritheciis sparsis, ad 140 μ . matrice supra atrata immersis, 1,5-2 mm. long., 0,3-0,7 mm. lat. (majoribus), oblongis, depressis, ostiolo applanato, oblongo, non emergente, contextu membranaceo-molli, parum evoluto, brunneolo, e cellulis angustis conflato; ascis cylindraceis, breviter pedicellatis, apice rotundatis, tenui-tunicatis, octosporis, 175-200 \approx 9-9,5; paraphysibus copiosis, 1 μ . cr., sursum ramoso-connexis, muco obductis; sporidiis monostichis, oblongis utrinque obtusule tenuatis, rectis, bicellularibus ad septum non v. vix constrictis, umbrinis, 26-30 \approx 7-8, tunica duplici præditis, tenuiter reticulato-spinulosis.

Hab. in culmis tenuioribus *Bambusæ* in horto botanico Buitenzorg Javæ.

18. *Didymosphæria bambusicola* v. Höhn., Ergeb. Bot. Exped. Südbas. 3913 1901, Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) p. 25. — Peritheciis gregarie sparsis, epidermide non atrata tectis, nigro-brunneis, firme membranaceis, globulosis, supra late conoideis, 400-450 μ . diam.; ascis cylindraceis 65-70 \approx 4-5,5; paraphysibus copiosis, filiformibus, sursum reticulato-connexis, dein deliquescentibus; sporidiis monostichis, brunneis, bicellularibus, levibus, oblongis, utrinque sæpius obtuse conico-tenuatis, medio leviter constrictis, 8-12 \approx 3-4, cellula sup. pro more paullo crassiore.

Hab. in culmis *Bambusæ*, Sao Paulo Brasiliæ.

19. *Didymosphæria saccharicola* Speg., An. Mus. Nac. Buenos Aires 3914 t. XIX (1909) p. 370. — Matrice non v. vix infusata; peritheciis parvis laxè gregariis vix ostiolato-papillatis, 150-180 μ . diam.; ascis cylindraceis breviuscule pedicellatis, octosporis, 110-120 \approx 8-10, paraphysibus filiformibus sublongioribus densis obvallatis; sporidiis monostichis, elongato-ellipsoideis, medio 1-septatis, non vel vix constrictis, pallide fuligineis, rectis v. obsoletissime subnavicularibus, 15 \approx 5, loculis æqualibus 1-guttulatis.

Hab. ad culmos dejectos putrescentes Sacchari officinarum prope Ledesma, Jujuy Rep. Argentina Amer. austr.

20. *Didymosphæria Werthiana* P. Henn., Deutsche Südpolar-Exped. 3915 Bd. VIII (1906) pag. 10, tab. II, f. 6 a-b (extr.). — Peritheciis amphigenis sparsis v. gregariis, innato-tectis, ostiolo erumpentibus, atro-membranaceis, subglobosis, 250-280 μ . diam.; ascis late clavatis, apice tunicatis, obtuse rotundatis, basi attenuatis, sæpe stipitato-curvatis, octosporis, 80-120 \times 25-40; paraphysibus filiformibus, hyalinis; sporidiis subdistichis v. conglobatis, sæpe crasse hyalino-mucosis, ellipsoideis v. subovoideis, rectis v. subcurvis, primo hyalinis, 2-guttatis, dein fusco-brunneis, medio 1-septatis, constrictis, 25-30 \times 10-14.

Hab. in foliis Poæ Cookii in Possession ex insulis Crozet in Polo austr. (Doct. E. WERTH). — Species prædistincta.

21. *Didymosphæria Puyæ* (Speg.) Sacc. et Trott., *Microthelia Puyæ* 3916 Speg., Fungi Chilenses (1910) p. 71, c. ic. — Maculis nullis; peritheciis epiphyllis, globosis, 200-250 μ . diam., matrice omnino infossis, ostiolo vix papillato superficiem epidermidis attingente, areola pusilla nigra cincto, coronatis; ascis cylindraceis, breviter pedicellatis, parce paraphysatis, octosporis, 140-160 \times 14-15; sporidiis submediocribus, pulchre fuligineis, tunica mucosa crassa vestitis, 20-22 \times 9-10.

Hab. in foliis emortuis putrescentibus Puyæ chilensis, Cerro Alegre de Valparaíso, Chile Amer. austr.

Subgen. *Endococcus* Nyl. Species lichenicolæ [Cfr. Syll. XVII, p. 631].

22. *Didymosphæria stictaria* (Linds.) Sacc. et Trott., *Microthelia stictaria* Linds., Lichenic. Micro-fungi p. 541, t. XXIV, f. 4-5. — Peritheciis minutis, nigris, superficialibus et facile secedentibus; ascis crasse clavatis, deorsum tenuatis, jodo violascentibus, minutis; sporidiis laxè distichis. constricto-didymis, loculo superiore lenissime crassiore, ex olivaceo brunneis, minutis, 8 \times 3,5.

Hab. in thallo Stictæ Freycinetii Campbell's Island (HOOKER). — Ab affini *D. rugulosaria* sporidiis minoribus recedit.

23. *Didymosphæria perrugosaria* (Linds.) Sacc. et Trott., *Microthelia perrugosaria* Linds., Lich. and Fungi Otago p. 437, t. XXX, f. 23-28. — Peritheciis gregariis semiimmersis, nigris, e cellulis minutis densis atro-brunneis formatis; ascis cylindraceis v. clavatis, copiose paraphysatis, jodo flaventibus, octosporis, 50 \times 12; sporidiis obli-

que monostichis v. distichis, ellipsoideis, 1-septatis, non constrictis 12 \approx 6-7, brunneis.

Hab. in apotheciis, quæ nigro-punctata fiunt, Placopsidis perrugosæ, Otago in Nova Zelandia.

24. *Didymosphæria* ? *Sauteri* (Körb.) Wint. — Syll. IX, pag. 738 — 3919
var. *margarodes* (Norm.) Sacc. et Trav. — Syll. XIX, p. 600. —
Polycoccum Sauteri var. *margarodes* Norm., Arnold in Flora, 57
(1874) pag. 174, t. II, fig. 10. — Sporidiis fuscis, didymis, 18-
22 \approx 8-9.

Hab. parasitice in Lichenibus in Lapponia.

25. *Didymosphæria rugulosaria* (Linds.) Sacc. et Trott., *Microthelia* 3920
rugulosaria Linds., Lichenicol. Micro-fungi, p. 540, t. XXIII, f. 32.
— Peritheciis minutissimis, punctiformibus v. papilliformibus, nigris, innato-superficialibus; ascis filiformi-paraphysatis, 40 \approx 12-13, octosporis; sporidiis ellipsoideo-clavatis, 12 \approx 4,5, loculo superiori crassiore et obtusiore, brunneis.

Hab. in apotheciis Placodii rugulosi ad saxa in Tasmania.

MICROTHELIÆ spec. Lindsayanæ, in Syll. XX, p. 89-90 citatæ, rectius sub nominibus seq. in Syll. voluminibus præcedentibus describuntur: *Microthelia atricola* = *Tichothecium erraticum*, Syll. IX, 726 — *M. Cookei* = *Mycosphærella Cookei*, Syll. XVII, 649 — *M. parietinaria* = *Didymosphæria parietinaria*, Syll. XVII, 681 — *M. ramalinaria* (sterilis, indeterminanda) — *M. stereocaulicola* = *Didymosphæria stereocaulicola*, Syll. XVII, 681. — *M. Umbilicaræ* = *Leptosphaeria Umbilicaræ*, Syll. XVII, 731 — *M. vesicularia* = *Tichothecium pygmæum*, Syll. IX, 726. — Ceteræ species sub generibus variis in ipso hoc volumine describuntur.

MASSARIELLA Speg. — Syll. I p. 716, IX p. 739, XI p. 314, XIV p. 555, XVI p. 503, XVII p. 683.

1. *Massariella berberidincola* (Rehm) Sacc. et Trott., *Phorcys berberidincola* Rehm, Ann. Myc. IV (1906) p. 268. — Peritheciis gregaris in cortice interiore fuscato nidulantibus, plane tectis, ex peridermio immutato vix protuberantibus, globulosis, ostiolis minimis prominentibus, nigris, submembranaceis, contextu parenchymatico, fusco, glabris 0,4-0,5 mm. diam.; ascis cylindraceis, apice rotundatis, 200-220 \approx 18 octosporis; sporidiis oblongis, utrinque obtusis, medio septatis et valde constrictis, 24-27 \approx 15, 1-stichis; paraphysibus ramosis, 3 μ . cr.

Hab. ad truncum *Berberidis vulgaris* juxta Eibsee sub monte Zugspitz alpium Bavariae.

2. *Massariella Hualaniæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 3922 (1909) p. 368 c. ic. — Peritheciis denudatis lenticularibus, gregariis, vix papillulato-ostiolatis atris, 220-250 μ . diam.; ascis cylindraceis paraphysatis, octosporis 130 \approx 20; sporidiis sæpius oblique monostichis, in ascis tunica mucosa crassa hyalina vestitis, extus sæpius denudatis, 22-28 \times 10-12, primo medio 1-septatis, non v. vix constrictis, hyalinis, serius 3-septatis constrictis fuliginis, oculis subæqualibus subcuboideis grosse 1-guttulatis.

Hab. ad ramos aridos et putrescentes *Hualaniæ* collectio-
idis, Chacras de Coria prope Mendoza, Rep. Argentina Amer.
austr. — An melius *Massaria*?

3. *Massariella Yerbæ* Speg., An. Mus. Nac. Buenos Aires t. XVII 3923 (1908) pag. 123, c. ic. — Corticola, epidermide velata; peritheciis lenticularibus, atris, membranaceo-carbonaceis, laxè gregariis, 400-750 μ . diam., ostiolo vix papillulato carbonaceo; ascis clavulato-cylindraceis, aparaphysatis, breviter cuneato-pedicellatis, 150 \approx 28 p. sporif. 120 μ . longa, apice obtuse rotundatis crasseque tunica-
tis; sporidiis majusculis ellipsoideo-subbiconicis, medio 1-septatis non v. vix constrictis, opace fuliginis, primitus tunica tenuissime mucosa hyalina obvolutis, dein nudis, utrinque rotundatis sed sæpius apiculatis, 30-35 \approx 14-15.

Hab. vulgata ad ramos emortuos *Illicis paraguariensis* (*Yerba Mate*) Misiones Argentinæ Amer. austr.

4. *Massariella Montteæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 3924 (1909) p. 367, cum icon. — Peritheciis sparsis v. laxè gregariis primo cortice tectis eoque secedente denudatis, parvis, carbonaceis, lenticulari-conoideis 150-250 μ . diam., vix ostiolato-papillatis; ascis subcylindraceis aparaphysatis subsessilibus, octosporis, 140-150 \approx 15-20; sporidiis monostichis ellipsoideo-didymis, tunica mucosa hyalina vestitis, fuliginis, grosse uniguttulatis, 20-24 \approx 12-13.

Hab. ad ramulos emortuos *Montteæ* aphyllæ in preandinis Potrerillos, prope Mendoza Rep. Argentina Amer. austr.

5. *Massariella palmicola* P. Henn., Engl. Jahrb. XXXVII (1905) 3925 p. 126. — Peritheciis gregarie sparsis, omnino immersis, atro-carbonaceis, globulosis v. ovoideis, 1-1,5 mm. diam., ostiolis vix erumpentibus, massam atram sporidiorum eructantibus; ascis clavatis, stipitatis, apice obtuse rotundatis, octosporis, 200-230 \approx 9-12, paraphysibus filiformibus, hyalinis, 2 μ . crassis; sporidiis oblique

monostichis, oblongis, subcylindraceis, utrinque obtusiusculis, rectis, ad basim 1-septatis, olivaceo-brunneis, 2-guttulatis, $20-30 \approx 6-8$, cellula inferiori subpapillata, $4-6 \approx 3-4$.

Hab. ad stipitem emortuum Palmæ spec., Kamerun Africae trop.

6. *Massariella Palmarum* Maffei, Contr. Mic. Ligust. Atti R. Istit. Bot. 3926 Pavia ser. II, v. XII (1907, extr.) p. 5, tav. fig. 1-5. — Maculis atris; peritheciis sparsis v. gregariis, globoso-depressis, maiusculis, ostiolo erumpente; ascis cylindraceis, $80-110 \approx 10-13$, paraphysatis, octosporis; sporidiis oblique monostichis, ellipsoideis, uniseptatis, ad septum constrictis, olivaceo-fuligineis, strato hyalino obvolutis, $15-18 \approx 6-8$.

Hab. in foliis Cocoës campestris et Phœnicis silvestris, Pegli Liguriae Ital. bor.

7. *Massariella loveareana* (Rehm) Sacc. et Trott., *Phorcys Loveareana* 3927 Rehm, Ann. Mycol. IV (1906) p. 269. — Peritheciis sparsis, folio immutato innatis, globulosis, papillula conoidea, obtusa, 0,2 mm. prominente, fusco-nigris, 0,2 mm. diam., subcoriaceis glabris; ascis cylindraceis, apice rotundatis, $150-180 \approx 28-30$, 8-sporis; sporidiis ellipsoideis, medio septatis et valde constrictis, utroque apice papillulato-acutatis, subfuscis, guttulis minutissimis oleosis repletis, $30-38 \approx 12-15$, strato mucoso 5 μ . lato obductis, 1-stichis; paraphysibus filiformibus.

Hab. in folio graminis in muro prope Lovere (lacus Iseo) Italiae sup. (Dr. REHM). — Proxima *Mass. Eriophori* Feltgen (Pilzfl. Luxemburg, III, p. 162) ad *Eriophorum angustifolium*, sed sporidiis $40-43 \approx 17,5-28$ haud acutatis plane diversa videtur.

AMPHISPHERIA Ces. et De Not. — Syll. I p. 718, IX p. 741, XI p. 315, XIV p. 555, XVI p. 503, XVII p. 683.

1. *Amphisphæria æruginosa* Fairm., Proc. Rochester Ac. of Sc. IV 3928 (1906) p. 221, tab. XXII, fig. 1-4. — Peritheciis sparsis v. gregariis, minutis, $80-100 \mu$. diam., depresso hemisphaericis, erumpentibus, nigris, ostiolo minuto papillato; ascis teretibus, 4-8-sporis; sporidiis anguste ellipsoideis, utrinque obtusulis, rectis vel curvis, 1-septatis, vix constrictis, monostichis, initio fumosis dein pallide brunneis, $13-15 \approx 2,5-3,5$.

Hab. ad asses dejectos vetustos Tiliæ pr. Lyndonville N. Y. Amer. bor. — Lignum, quo innascitur, intus *Chlorosplenii* ope est viridi-tinctum.

2. *Amphisphæria biformis* (Borr.) Rehm, Ann. Mycol. IV (1906) 3929
p. 264, *Verrucaria biformis* Borr. in Engl. Bot. Suppl. I, p. 617, *Verrucaria micula* Flotow ap. Garovaglio, Tent. disp. II, p. 78, t. suppl. I, f. 4, *Microthelia micula* Korb. Syst. lich. Germ. p. 373 et Parerga pag. 397. — Mycelio tenuissimo indeterminato effuso cinereo-rufescente, nitidulo, dein opace subgranuloso; peritheciis sphaericis acuminato-papillatis v. collapsis; ascis elliptico-obovatis, paraphysibus tenuibus implexo-ramosis articulatis obvallatis; sporidiis dense 2-3-seriatis, ellipsoideis, $12,5-15,5 \times 4-5,7$, bilocularibus, loculis conformibus, late conicis apice rotundatis.
Hab. in cortice Tiliæ in tota fere Europa. — Auctoritate cl. Rehm huc translata species.
3. *Amphisphæria ephemera* Rehm, Ann. Mycol. IV (1906) p. 263. 3930
— Peritheciis in interiore corticis relaxati sparsis, sessilibus, globulosis, nudo oculo vix conspicuis, nigris, circa ostiolum pilis obtusis, fuscidulis, septatis, $10-25 \times 5$ obsessis, 100μ . diam., contextu parenchymatico; ascis clavatis, paraphysibus septatis obvallatis, teneris, 60×15 , octosporis; sporidiis oblongo-ovoideis, medio septatis, non constrictis, $12-13 \times 6-7$, distichis, fuscis, grosse 2-guttatis.
Hab. ad corticem Piri Mali, Sugenheim Franconiae bav.
4. *Amphisphæria xera* Fairm., Ann. myc. VIII (1910) p. 327. — Peri- 3931
theeciis $0,5$ mm. diam., atris, carbonaceis, sparsis vel subgregariis, initio immersis, dein superficialibus; glabris, ostiolo minuto; ascis cylindraceutis, p. sp. 70-75, octosporis (? paraphysatis); sporidiis oblongis, uniseptatis, constrictis, loculis inæqualibus, guttulatis, granulosis, sæpissime tenui fissura divisis, striatis v. corrugatis (ex siccitate?), monostichis v. subdistichis, fusco-olivaceis, fuliginosisve, $17-23 \times 6-7$.
Hab. ad corticem ? Pruni sp. in silvis prope Lyndonville N. Y. Amer. bor.
5. *Amphisphæria Schulzeri* Sacc. et Trav. - Syll. XIX, pag. 68 - 3932
Sphaeria Amphisphaeria Schulz. v. Mügg. in Verhandl. zool.-bot. Gesellsch (1871) p. 1255, t. 13, f. 36. — Peritheciis subsuperficialibus, approximatis, globoso-ovoideis, nunc papillatis, nunc epapillatis; minute verruculosis, $200-270 \mu$. diam., tenuiter carbonaceis, vetustis vertice ruptis; ascis cylindraceutis, filiformi paraphysatis, octosporis, breviter pedicellatis; sporidiis recte vel oblique monostichis, ellipsoideo-oblongis, utrinque rotundatis v. obtuse te-

nuatis, constricto-didymis, $17 \approx 8$, fuligineis, extra ascos subinde 2-3-septatis.

Hab. in ramis emortuis *Cydoniæ vulgaris* in Hungaria.

6. *Amphisphæria quinquespora* Schulzer v. Mügg. in Verhandl. zool.-bot. Gesell. Wien (1871) p. 1224 et 1242, t. 13, f. 4 (*libera*) et 22 (*obtecta*). — Peritheciis globosis 300-400 μ . diam. nunc liberis verruculosus nunc peridermio pustulatum elevato tectis, nigris; ascis breviter oblongo-cylindraceis, brevissime stipitatis 5-sporis filiformi-paraphysatis; sporidiis ellipsoideo-oblongis, constricto-1-septatis, maturis $18-22 \approx 8-9$. 3933

Hab. in ramis corticatis et decorticatis *Cydoniæ vulgaris* in Hungaria. — An sporidia semper sint quina in quoque asco, dubitandum.

7. *Amphisphæria Cydoniæ* Schulz. v. Mügg. in Verh. zool.-bot. Gesellsch. Wien (1871) p. 1251, t. XIII, f. 31. — Peritheciis gregariis superficialibus, globoso-depressis, non papillatis, poro pertusis, nigris, 300-400 μ . diam.; ascis filiformi-paraphysatis clavatis, apice rotundatis deorsum tenuato-stipitatis, octosporis; sporidiis ellipsoideo-oblongis, utrinque obtusulis, constricto-1-septatis, umbrino-brunneis, $12-16 \approx 4-5$, oblique monostichis, vel apice subdistichis. 3934

Hab. in ramis decorticatis *Cydoniæ vulgaris* in Hungaria.

8. *Amphisphæria Heraclei* Noelli, Malp. XIX (1905) p. 360. — Peritheciis sparsis, nigris, in greges minutos coadunatis, v. solitariis, superficialibus, globosis, sursum in ostiolum conicum productis, 300 μ . diam.; ascis cylindraceis, basim versus sæpe curvatis, $48-73 \approx 4-5$; paraphysibus filiformibus ascos æquantibus; sporidiis minutis, constricto-1-septatis, fuligineis, non guttulatis, $7-11 \approx 4-5$, loculo uno minore et obtusiore. 3935

Hab. in caulibus siccis *Heraclei Sphondylii* in silvis Stupinigi, pr. Taurinum Ital. bor. — Verisimiliter forma *Didymosphæriæ conoideæ* Niessl — Syll. I p. 702.

9. *Amphisphæria pseudostromatica* Rick, Ann. Mycol. III (1905) p. 240. — Peritheciis innatis, ad medium productis, 1 mm. latis, ostiolo minuto, in substrato longe lateque nigrefacto insidentibus, mycelio subperisporioideo circumdatis, arcte aggregatis, atris; ascis cylindricis, sessilibus, $60 \approx 20$, versus apicem angustioribus, octosporis; sporidiis cylindricis, medio septatis, vix constrictis, fuligineis, biguttulatis, distichis, $20-25 \approx 6$, paraphysibus multis, ramosis, filiformibus. 3936

Hab. in planta scandente generis *Strychni*, in Brasilia. —
Est affinis *Amphisphærice Pseudo-dothideæ* Rehm.

10. *Amphisphæria ericeti* B. R. S. in Saccardo, Not. Myc. VI, Ann. 3987
Myc. v. III (1905) p. 508. — Peritheciis globulosis, sparsis, innatis dein semi-emergentibus, levibus, 260-300 μ . diam., poro latiusculo apertis, nigris; ascis clavato-cylindræis, 70-80 \times 9-11, breve noduloso-stipitatis, octosporis; paraphysibus filiformibus ascos superantibus; sporidiis distichis, breve fusoides, plerumque curvulis, 12-18 \times 4-5, brunneis, medio 1-septatis constrictisque, loculo infero attenuato, supero crassiore et obtusiusculo.

Hab. in ligno canescente *Callunæ vulgaris*, Calmpthout pr. Anvers Belgii.

11. *Amphisphæria ulmicola* (Curr.) Sacc. et Trav. - Syll. XIX p. 68 3938
- *Sphæria ulmicola* Curr. in Trans. Linn. Soc. XXII (1859) p. 321, t. 58. f. 58. — Peritheciis majusculis, globosis, ligno semiimmersis, ostiolo papillato, dein deciduo et porum latum relinquente; ascis non visis; sporidiis oblongis utrinque obtuse tenuatis, medio constrictis, loculo sup. subinde lenissime crassiore, 22-24 \times 5,5-6,5.

Hab. in ligno Ulmi in Britannia.

12. *Amphisphæria polymorpha* Rehm ap. Fairm., Proc. Rochest. Ac. 3939
of Sc. IV (1906) p. 222. — Peritheciis dispersis, primitus innatis dein emergentibus, globoso-conoideis, plus minusve elongato-papillatis, atris, glabris, 0,5 mm. diam., ad basim hyphis crebris, ramosis, fuscis 3-4 μ . cr. obsessis, contextu parenchymatico subcarbonaceo; ascis elongato-fusoides, apice rotundatis, crasse tunicatis, 210-250 \times 30-35, tetra-octosporis; sporidiis fusoides, rectis, primitus utrinque acutissimis, episporio crasso instructis, medio septatis, vix constrictis, evanido-guttulatis, 75-80 \times 12-20, distichis; paraphysibus ramosis, septatis, hyalinis, 2 μ . cr.

Hab. ad corticem trunci dejecti prob. Ulmi sp. in silvaticis pr. Lyndonville. — *Polymorpha* dicta quia sec. ætatem colore et forma variat.

13. *Amphisphæria lignicola* (v. Höhn.) Sacc. et Trott., *Didymascina* 3940
lignicola v. Höhn., Ann. Mycol. III (1905) p. 331. — Peritheciis ovoideo-globosis, ligno atrato immersis, subsparsis, initio clausis, denique poro rotundo pertusis, 300-400 μ . diam., cinereo-nigris v. nigricantibus; excipulo genuino nullo; ascis copiosis, cylindricis, vix stipitatis, octosporis 100-110 \times 9-10; sporidiis medio 1-septatis, non v. vix constrictis, monostichis, brunneis, oblongo-

ellipsoideis 14-20 \times 6,5-8; paraphysibus copiosis, filiformibus, sursum ramulosis, reticulato-connexis epithecium formantibus.

Hab. in ligno Carpini Betuli prope Pressbaum in Wiener Wald - cl. v. HÖHNEL hanc speciem æque ac *Amphisphæria salicicolam* Allesch. - Syll. XIV p. 556 (= *Didymosphæria decolorans* Rehm - Syll. XIV p. 553) in genus novum (*Didymascina*) primitus erexit et ad *Ostropeas* retulit, sed posterius delevit (Fragm. IX p. 41).

14. *Amphisphæria nitidula* v. Höhnel, Fragm. z. Mycol. III in Sitzsb. 3941

K. Ak. d. Wiss. Wien, Bd. CXVI Abt. I (1907) p. 120. — Peritheciis superficialibus, sparsis v. in greges parvos proximatis, globosis, 260-500 μ . diam., nitide nigris, carbonaceis, distincte rugulosis, ostiolo depresso, 20-25 μ . lato; paraphysibus copiosissimis filiformibus, ascis æquantibus; ascis clavatis, sursum tenuatis, in pedicellum 20-25 μ . longum productis, octosporis, 60 \times 8-9; sporidiis distichis, diu hyalinis, demum cinereo-brunneis, bicellularibus, ad septum obscurius coloratum non constrictis, oblongo-ellipsoideis, utrinque rotundatis, initio pluriguttulatis, tenui-tunicatis, 6-8 \times 3-4.

Hab. in ligno putri Carpini Betuli, Wiener Wald Austriæ. — Videtur affinis *A. sardocæ* et *A. deformi*.

15. *Amphisphæria aquatica* Plötn. et Kirsch., Verh. Bot. Ver. Brandenb. 3942

XLVIII (1906) p. 52. — Peritheciis solitariis v. in greges minutos proximatis, basi lata ligno adnato-sessilibus, sursum conoideis 0,5-0,7 mm. diam., nigris, membranaceis; ascis cylindraceis, sessilibus, apice plano-rotundatis, 200 \times 14-18, octosporis; sporidiis ellipsoideis, plerumque irregularibus, utrinque rotundatis v. subacutatis, 2-cellularibus, non v. vix constrictis, dense pluriguttulatis, monostichis, 30-37 \times 8-14; paraphysibus filiformibus, hyalinis.

Hab. in lignis salicinis, aqua diu immersis, in Borussia (PLÖTTNER et KIRSCHSTEIN).

16. *Amphisphæria Lojkæ* Rehm, Ann. Mycol. IV (1906) p. 261. — 3943

Peritheciis gregariis emergentibus, basi cortice immersis, globulosis, atris, scabriusculis, haud papillulatis, poro perspicuo pertusis, carbonaceis, 0,4-1 mm. diam.; ascis clavatis, octosporis filiformi-paraphysatis; sporidiis clavatis, utrinque obtusis, monostichis, sub medio 1-septatis, leniter constrictis, strato mucoso lato obductis, fuscis, 36 \times 12, cellula superiore 21-24 \times 12, inferiore 12 \times 6.

Hab. ad corticem *Quercus*, Galizinberger pr. Vindobonam (LOJKA). — Affinis *Amp. inæquali*.

17. *Amphisphæria pachnea* (Körb.) Rehm, Ann. Mycol. IV (1906) 3944 p. 264, *Microthelia pachnea* Körb. Parerga lich. (1865) p. 398. — Mycelio maculari-determinato, tenuissimo, subverniceo-membranaceo, albicante; peritheciis minutis, sparsis, globoso-hemisphæricis, nitidulis, basi infixis, obsolete umbilicatis; ascis cylindraceo-clavatis, octosporis; sporidiis soleiformibus, bicellularibus, diblastis, dilute fuscis, diametro suo $2\frac{1}{2}$ -3-plove longioribus (10-15 \times 4-5 sec. Sydow, Flecht. Deutsch. p. 271).
Hab. ad corticem Abietis pr. Kremsmünster Austriæ sup. (Pörsch). — Auctoritate cl. Rehm ad gen. *Amphisphæriam* translata.
18. *Amphisphæria applanata* (Fr.) Ces. et De Not. - Syll. I p. 718 et 3945 IX p. 741, **Amphis. vestigialis* Fairm. Ann. mycol. (1910) p. 327, cum icon. Mycotheca n. 2375. — Peritheciis sparsis, superficialibus, globosis, rugulosis, atris, c. 500 μ . latis; ascis cylindraceis, apice rotundatis, sessilibus v. breve stipitatis, 135-170 \times 16-20, paraphysatis, 8-sporis; sporidiis oblongo-fusoides, rectis, v. curvulis, monostichis v. subdistichis, nucleolatis et granulosis, uniseptatis, sepimento lato perspicuo, cellulis inæqualibus, loculo inferiori obtuso, loculo superiori majori, acuminato, primo hyalinis dein brunneis, 30-33 \times 8-10.
Hab. in ramis decorticatis Tsugæ canadensis, Lyndonville N. Y. Amer. bor.
19. *Amphisphæria umbrinoidea* Pass., Syll. IX p. 745 - var. *Rhododendri* Rehm, Oesterr. bot. Zeitschr. LVI (1906) p. 295. — (Nomen nudum).
Hab. in ramulis Rhododendri ferruginei, Alpeiner Alpe Stubai Austriæ.
20. *Amphisphæria abietina* Fairm., Proc. Rochester Ac. of Sc. IV 3947 (1906) p. 219. — Peritheciis sparsis v. laxe gregariis, minute depresso hemisphæricis, tenuibus, initio peridermium in pustulas elevantibus dein suberumpentibus, brunneis, apice nigris, facile secedentibus et depressiones relinquentibus, ostiolo minuto papillato; ascis tereti-oblongis, 100-110 \times 20, octosporis, paraphysibus filiformibus nucleolatis; sporidiis irregulariter biserialis, ellipsoideis, utrinque rotundatis, ad septum vix v. non constrictis, initio fumosis, nucleolatis v. granulosis, dein brunneis, 23-28 \times 6-10.
Hab. in areis levigatis corticis Tsugæ canadensis in silvis, Lyndonville N. Y. Amer. bor.
21. *Amphisphæria Bertiana* Fairm., Proc. Rochest. Ac. of Sc. IV 3948 (1906) pag. 217, tab. XX, f. 3-4. — Peritheciis gregariis, ramis

subsparsis, 300-500 μ . diam., globosis v. ovato-globosis, nigricantibus, tuberculato-rugosis, ostiolo nitido, prominenti, conico pertusis, nucleo albo; ascis octosporis anguste tereti-clavatis in pedicellum longe filiformem tenuatis, 125-150 \times 5-6, paraphysibus filiformibus copiosis, obvallatis; sporidiis monostichis, ellipsoideis, utrinque obtuse rotundatis, ad septum crassum nigrum non constrictis, grosse 2-guttatis, olivaceo-brunneis, 10-12 \times 3-4.

Hab. in truncis cavis in silvis Lyndonville N. Y. Amer. bor.

— *Amph. granulose* affinis.

22. **Amphisphæria Bambusæ** Trav. Malp. (1905) p. 136. — Peritheciis 3949
 ciis sparsis, raro 2-3-proximatis, ligno basi tantum parce insculptis, globoso-depressis, majusculis, 0,7-1,2 mm. diam., atris, pachydermatis, rugulosis, in ostiolum conoideum v. breviter cylindraceum productis; ascis cylindraceis, deorsum breviter tenuatopedicellatis, 90-105 \times 11-14, paraphysibus filiformibus paullo longioribus obvallatis; sporidiis oblique rarius subrecte monostichis, late ellipsoideis, utrinque obtusis rotundatisque, ad septum constrictis, fuligineo-brunneis, typice eguttulatis, 14-17 \times 8-9.

Hab. in parte interiore culmorum exsiccatorum *Bambusæ* sp., socio *Coniosporio Bambusæ*, Villa Stroppa ad Tradate, Como Italiæ bor. — Ab *Amph. culmicola* plurimis notis recedit.

23. **Amphisphæria parva** Vouaux in Bouly de Lesdain, Bull. Soc. 3950
 bot. France, LVI (1909) p. 5 (nota). — Peritheciis sparsis, semiimmersis, hemisphæricis, nigris, 200-300 μ . diam., carbonaceis, ostiolo papillato; ascis cylindricis, breve stipitatis, 100-110 \times 8, octosporis; sporidiis ellipsoideis, didymis, fuscis, medio parum constrictis, 14-18 \times 6, monostichis; paraphysibus numerosis, filiformibus, ramosissimis.

Hab. in tela uda, dejecta, linoleum dicta prope Versailles Galliae.

PACHYSPORA Kirschst., Verh. Bot. Ver. Brandenb. XLVIII (1906) p. 48. (Etym. *pachys* crassus et spora). — Perithecia superficialia, subiculo brunneo tenuissimo inserta, minutissima, nigra, molliter membranacea, globuloso-conica, ostiolo papillato pertusa, breviter velutina. Asci clavati, bispori, filiformi-paraphysati. Sporidia bicellularia, ovato-oblonga, tandem in articulos binos secedentia.

1. **Pachyspora gigantea** Kirschst. l. c., p. 49, cum fig. — Peritheciis 3951
 gregariis v. subsparsis, subiculo velutino brunneo insertis, brevissime tomentellis, 150-200 μ . diam., ostiolo breviter obtuse papil-

lato; ascis clavatis deorsum breviter tenuato-stipitatis, 110-120 \times 25-32, apice rotundatis, bisporis; sporidiis oblongis, utrinque obtusulis v. apice uno acutulis, constricto-1-septatis, 50-64 \times 24-30, loculis subglobosis, demum secedentibus.

Hab. in ligno putrescente quercino, Havelufer pr. Rathe-
now Borussiæ.

NEOPECKIA Sacc. — Syll. IX p. 749, XI p. 317, XIV p. 558,
XVI p. 506, XVII p. 686.

1. **Neopectia Bambusæ** v. Höhn. *Fragm. z. Myk.* VI in *Stzb. k.* 3952
Ak. d. Wiss. Wien, CXVIII, Abt. I (1909) p. 329. — Peritheciis
superficialibus laxè gregariis, carbonaceis, solidis, asperulis, opacis,
globosis, supra rotundatis, 400-600 μ . lat., basi hyphis violaceo-
brunneis, tortuosis 3-4 μ . cr. cinctis; ascis aparaphysatis, longe
pedicellatis, apice truncatis, tenui-tunicatis, octosporis, 120 \times 16;
sporidiis bi-triseriatis, diaphane brunneis, oblongo-ellipsoideis, utrin-
que rotundatis, ad septum leniter constrictis, 16-19 \times 6-7, rectis
curvulisve, 2-4-guttulatis.

Hab. ad culmos putrescentes *Bambusæ* (*Gigantochloæ*) sp.
in horto botanico, Buitenzorg Javæ. — Status conidicus simul
adest: *Phæoisaria Bambusæ* v. Höhn. quam cfr.

2. **Neopectia nobilis** Rick, *Broteria* V (1906) pag. 44. — Peritheciis 3953
majusculis, 1 mm. diam., orbicularibus v. cylindraceis, superius
fuligineis, versus ostiola late apertis, inferius pilis longis $\frac{1}{2}$ mm.,
fuligineis, simplicibus, 3 μ . latis vestitis; contextu coriaceo-molli;
ascis 180 \times 13, breviter pedicellatis, clavatis, octosporis; sporidiis
fusoideis, biserialibus, primo hyalinis, demum fuligineis, uniseptatis,
in septo parum constrictis, guttulatis, 40-50 \times 12; paraphysibus
hyalinis, ramosis, ascos superantibus et obtegentibus, 2 μ . latis.

Hab. in ramis putridis, Rio Grande do Sul Brasilæ. — Spe-
cies nobilis ab omnibus distincta et discomycetis pilosis accedens.
— *Var. calva* Rick, in Theiss., *Beih. Bot. Centralbl.* Bd. XXVII
(1910) Abt. II, p. 398. — A typo differt peritheciis levibus. —
Ad cortices Petropolis, Rio Grande do Sul Brasilæ.

3. **Neopectia Roberti** Starb., *Ascom. Schwed. Chaco-Cordill. Exped.* 3954
Arkiv f. Bot. V (1905) p. 16, fig. 11 a-c. — Subiculo longe la-
teque effuso, ex hyphis rigidis, longissimis, parce septatis, simpli-
cibus interdum paullum fasciculatis, rectis et divergentibus, vix
repentibus, 5-9 μ . crassis composito; peritheciis primo gregariis
vel confertulis, deinde densissime aggregatis fere crustam valde

effusam formantibus, sphaerioideis vel mutua pressione paullum angulatis, vertice applanatis, pilis rigidis, flexuosis, sæpe genuflexis, parce deorsum dense septatis, fusco-nigris, ad apicem fragilem hyalinis, hyphis mycelii similibus undique vestitis, nigris, vertice glabro, sordide griseo-rubello, paullum e centro poro pertuso radiatim sulcatulo, denique totis levibus, rugosis, contextu minute globuloso, molliuscule coriaceo, 300-500 μ . diam.; ascis octosporis, cylindraceo-clavatis, sursum rotundatis, deorsum longe pedicellatis, 94-102 \times 12-14 p. sp.; sporidiis superioribus di-tristichis, inferioribus monostichis, fuscoideis, medio constrictulis, septatis, primo hyalinis, deinde pallide fuscescentibus, utrinque obtusiuscule apiculatis, appendicula longiuscula, angusta, hyalina præditis, 32-36 \times 6,5, cum appendice 40-45 μ . longis; paraphysibus filiformibus flexuosis, ramosissimis, hyalinis, ascos obvallantibus.

Hab. in trunco mucido in silva primæva, Quinta pr., Laguna de la Brea, Prov. Jujuy Argentina. — *Herpotrichiæ Schiedermayerianæ* affinis videtur, sed sporidiis bilocularibus *Neopeckia* adscribenda.

4. *Neopeckia rhodosticta* (B. et Br.) Sacc. - Syll. XI, 317 - Huc referenda est, monente quoque cl. v. HÖHNEL (qui exempl. meliora javanica communicavit), *Letendrea atrata* Penz. et Sacc. - Syll. XIV p. 646. 3955

LIZONIA Ces. et De Not. — Syll. I p. 574, IX p. 679, XIV p. 538, XVI p. 485.

1. *Lizonia Smilacis* Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 386. 3956
Maculis subrotundis, flavis, centro brunneis, 3-4 mm. lat., dein confluentibus; peritheciis hypophyllis 3-7 coadunatis, 260-290 μ . lat., 320 μ . altis, e mycelio intercellulari pseudo-parenchymatico oriundis, nigris, glabris, brevissime crasse substipitatis, pachydermaticis, ostiolo vix conspicuo 15 μ . alto, poro 10 μ . lato pertuso; nucleo albo; ascis copiose filiformi-paraphysatis, tereti-clavatis, 100 \times 14, octosporis, curvulis, teneris; sporidiis fuscoideis, curvulis, levibus, 22-24 \times 4-5, bicellularibus, tunica hyalina dein brunneola.

Hab. in foliis *Smilacis* sp. pr. Tjisaroea pr. Buitenzorg Javae. — Sporidia serius interdum 4-cellularia fiunt.

2. *Lizonia Selaginellæ* Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 386. 3957
— Peritheciis in pseudostromate nigro chordiformi parum evoluto superficialibus, confertim gregariis fere conjunctis, globoso-ovoideis,

250-360 μ . lat., 400 μ . alt., ostiolo minuto depresso præditis, glabris, nigris; ascis aparaphysatis, 120 \times 10, teneris, apice truncato-rotundatis, octosporis; sporidiis monostichis, ovoideis, hyalinis, bicellularibus, 12-17 \times 5, septo vix constrictis, levibus, hyalinis, demum brunneolis.

Hab. in surculis *Selaginellæ cupressinæ* pr. Salak ins. Javæ. — Sporidia ante germinationem sæpe 4-cellularia fiunt.

ALOYSIELLA Mattir. et Sacc., *Annali di Botanica* VII (1908) p. 143; *Il Ruwenzori* (1909) *Fungi* pag. 5 (Etym. a Principe ALOYSIO SABAUDIÆ Aprutii Duce). — Perithecia subiculo dematiaceo insidentia, carbonacea, nigricantia, globosa, umbilicata, superne omnino nuda, non papillata; ascis cylindraceis octosporis, paraphysatis; sporidiis ovoideo-oblongis, 1-septatis, fuligineo-olivaceis. — *Obs.* A *Melanopsamma* differt sporidiis coloratis nec hyalinis, a *Neopeckia* peritheciis nudis, non papillatis; ab utraque quia parasitica et cecidogena.

1. **Aloysiella ruwenzorensis** Matt. et Sacc., *Annali di Botanica* VII 3958 (1908) p. 143; *Il Ruwenzori* etc. p. 6, tab. I, fig. 1-7. — Biophila, ramos matricis in formam fusoidream conspicue tumefaciens; subiculo velutino, nigro, æquali, partem matricis incrassatam tantum occupante, hyphis dense stipatis, ascendentibus, simplicibus v. parce ramosis, septatis, non constrictis, apice obtusiusculis, atro-fuligineis, 200-300 \times 4-5; conidiis nullis. — Peritheciis in subiculo hinc inde laxè sparsis, immersis, demum emergentibus, 300 μ . diam. et ultra, ex subgloboso- mox depresso-umbilicatis, nigris, glabris, basi subconoidea insertis, ubique pilis subicularibus vestitis, ostiolo latiuscule impresso, non papillato præditis; contextu parenchymatico crassiusculo; ascis cylindraceis brevissime stipitatis, apice rotundatis, octosporis, 85-90 \times 8, paraphysibus filiformibus superne dichotome ramosis, hyalinis obvallatis; sporidiis monostichis v. partim distichis, oblongo-ovoides, medio 1-septatis, non v. vix constrictis, utrinque obtusiusculis, 16-19 \times 5-6, initio hyalinis, demum olivaceo-fuligineis.

Hab. in ramis vivis *Ericæ arboreæ* in silvis inter Bihunga et Nakitáva usque ad Bujungolo, 1920 ad 3798 m. Ruwenzori, Africa austr.

DELITSCHIELLA Sacc. — Syll. XVII p. 688.

1. **Delitschiella elegans** (Santer.) Sacc. et Trott., *Delitschia elegans* 3959

Santermeister F. L. in Jahresb. Ver. Vat. Natk. Würtemb. LXVI p. 399. — Peritheciis generis; ascis sexdecimsporis; sporidiis oblongis $48 \approx 16$.

Hab. in stercore leporino, sociis *Sordaria bombardioide* et *Sporormia ambigua* pr Sigmaringen. — A *Delitschiella polyspora* sporidiis paullo minoribus imprimis dignoscitur.

Sect. 6. Hyalophragmiæ.

SPHÆRULINA Sacc. — Syll. II p. 186, IX p. 846, XI p. 336, XIV p. 581, XVI p. 528, XVII p. 692.

1. **Sphærulina Anemones** Rehm, Ann. Mycol. V (1907) pag. 539. — 3960
Peritheciis in hypophyllo dispersis, sessilibus, globulosis, atris in papillulam minutissimam elongatis, conoideis, 250 μ . alt. et lat. contextu parenchymatico fusco; ascis ovalibus sive piriformibus, lata basi sessilibus, versus apicem angustatis, crasse tunicatis, apice obtusis $200 \approx 70$, 8-sporis; sporidiis subclavatis, transverse 4-septatis, parte superiore minus longa, sed multo latiore, 1-septata inferiore conoidea 2-septata, quaque cellula gutta magna oleosa instructa, $50-65 \approx 20$ distichis, hyalinis; paraphysibus nullis.

Hab. in hypophyllo foliorum *Anemones silvestris* prope Arnstadt Thuringiæ (H. Sydow). — *Sphærulinae Potentillæ* cognata.

2. **Sphærulina Oxalidis** Rehm, Ann. Mycol. V (1907) pag. 517. — 3961
Peritheciis in cortice late denigrato gregarie innatis eumque protrudentibus, globosis, papillula minima modo prominente, 0,2 mm. diam., excipulo tenuissime parenchymatico fuscidulo; ascis oblongo-fusiformibus, sessilibus, $40-50 \approx 9-10$ octosporis; sporidiis oblongis, utrinque rotundatis, haud constrictis, medio 1-septatis, utraque cellula 1-guttata, hyalinis, strato tenui mucoso obductis, $10-12 \approx 2,5-3$ distichis; paraphysibus nullis.

Hab. ad ramulos *Oxalidis strictæ*, Texas (Long jr., comm. ATKINSON). — An *Didymella* sp.? sed paraphyses nullæ observante cl. Rehm; sed cur non potius *Sphærellæ* sp.?

3. **Sphærulina? Hamadryadum** Speg., An. Mus. Nac. Buenos Aires 3962 t. XIX (1909) p. 373. — Peritheciis epiphyllis innato-erumpentibus, hinc inde matrice arescente cinerescente leniter nigrificata insidentibus, ex hemisphærico subconoideis, $90-120 \mu$. diam., pilis

unicellularibus 20-30 \times 5, olivaceis, laxe adspersis; ascis clavulatis brevissime pedicellatis, paraphysatis, octosporis, 70-80 \times 14-16; sporidiis oblique distichis rectis v. lenissime subcurvulis, e cylindraceo subclavulatis, 24-26 \times 6-7, semper hyalinis, primo 4-blastis dein 1-septatis, postremo obsolete 3-septatis.

Hab. ad folia arida Hamadryadis Kingi prope Lago Blanco, Patagonia Amer. austr.

4. **Sphærulina Potebniæ** Sacc., in Potebnia, Myc. St., Ann. Myc. V 3963 (1907) p. 13, fig. 22, Trav. Soc. Nat. Univ. Kharkow XXXXVIII (1907) pag. 61. — Peritheciis gregariis superficialibus 70-100 μ ., sphæroideis; ascis cæspitosis ovoideo-cylindraceutis, 40-50 \times 10-17; paraphysibus nullis; sporidiis distichis, initio bilocularibus, hyalinis, dein triseptatis, pallide viridi-flavis, 12-14 \times 4,5-5.

Hab. in ramis Piri communis prope Kursk Stadt Ryłsk Poloniae.

5. **Sphærulina Saccardiana** Potebnia, Myc. St., Ann. Myc. V (1907), 3964 p. 14 fig. 23 et Trav. Soc. Nat. Univers. Kharkow XXXXVIII (1907) pag. 61. — Peritheciis 170-200 μ . cr.; ascis cylindraceutis 85 \times 9-10, paraphysibus destitutis; sporidiis distichis, flavidis 22-26 \times 6-7, 6-7-septatis, medio constrictis, raro longitudinaliter et imperfecte septatis.

Hab. in ramis Piri Mali, socio Fusicocco microsporo, prope Kursk Poloniae.

6. **Sphærulina Rehmiana** Jaap, Fungi sel. exsicc. n. 318 a, b; Abh. 3965 Bot. Ver. Prov. Brandenb. LII (1910) Extr. p. 10. — Peritheciis amphigenis gregariis, sæpius epiphyllis, erumpentibus, globoso-depressis, 100-150 μ diam., poro pertusis, brunneo-nigris; ascis fasciculatis, paraphysatis, tereti-fusoideis v. clavatis, apice acutato-rotundatis, 50-60 \times 6-7, senio elongatis et curvatis, octosporis; sporidiis tereti-fusoideis, obtusis, hyalinis, 2-4-cellularibus, di-tristichis, parallele dispositis, 30-50 \times 2,5-3,5.

Hab. in foliis Rosæ centifoliae, socio statu conidico Phleospora Rosæ (Desm.) v. Höhn., prope Triglitz Germaniae. — *Sphærulinea myriadeæ* subaffinis.

7. **Sphærulina Yerbæ** Speg., An. Mus. Nac. Buenos Aires t. XVII 3966 (1908) p. 124, cum icone. — Peritheciis laxè gregariis, hypophyllis, subepidermicis, 100-150 μ . diam., subcarbonaceis poro rotundo pertusis; ascis clavulatis modice tenuiterque pedicellatis paraphysatis 80-90 μ . long., parte sp. 50-60 \times 12-14, pedicello 30-40 \times 1,5-2, octosporis; sporidiis conglobatis ellipsoideo-cylindraceutis, medio in-

crassatis, utrinque obtusissimis, rotundatis, per ætatem biseptatis, 12-18 \approx 4-6, semper hyalinis.

Hab. vulgata ad folia dejecta putrescentia, Ilicis paraguariensis, Argentina, Amer. austr.

8. **Sphærulina plantaginea** Rehm, Ascom. exsicc. fasc. 42, n. 1793; 3967
Ann. Myc. VI (1908) p. 489. — Peritheciis in maculis epiphyllis orbicularibus, 2-3 mm. lat. gregariis, demum arete congregatis, innatis, globosis, poro pertusis, glabris, nigris, 120-130 μ , humidis emergentibus, excipulo crasso fusco parenchymatice contexto; ascis clavatis, apice rotundatis, crasse tunicatis, 70-80 \approx 18-20, octosporis; sporidiis primitus obtusis clavatis et strato hyalino obductis, 1-3-septatis, hyalinis, demum subfusoides, medio subconstrictis, extra ascum dilute fuscidulis, 20-30 \approx 8-9, distichis; paraphisibus subramosis.

Hab. in foliis vivis Plantaginis, Sao Leopoldo, Rio Grande do Sul, Brasilia (RICK).

9. **Sphærulina Valerianæ** Speg., An. Mus. Nac. Buenos Aires t. XIX 3968 (1909), p. 374. — Peritheciis sæpius epiphyllis maculis vagis indeterminatis 3-5 mm. diam. laxè pauci-insidentibus, lenticularibus, 100 μ . diam.; ascis clavatis 3-4 tantum in quoque perithecio, apapaphysatis, brevissime pedicellatis 60 \approx 20, octosporis; sporidiis subclavulatis 22 \approx 16, primo 1-septatis dein 4-septatis, hyalinis, tunica tenuissima mucosa concolore diu vestitis.

Hab. ad folia languida Valerianæ megalorrhizæ secus Rio Blanco Tucuman, Rep. Argentina.

10. **Sphærulina Taxi** Massee, Diseas. cultiv. Plants (1910) pag. 220, 3969 fig. 63. — Peritheciis gregariis epidermide pustulata tectis, globoso-lenticularibus, nigris, ostiolo breviter papillato erumpente; ascis elongato-clavatis, apice incrassatis, 65-75 \approx 12-14, apapaphysatis; sporidiis mono-distichis anguste ellipsoideis, utrinque acutiusculis, hyalinis, diu 1-septatis, denique 3-septatis, 16-22 \approx 5.

Hab. in foliis Taxi baccatæ, quam valde vexat et denique necat, Cornwall et Yorkshire Britannicæ.

11. **Sphærulina paulistana** Speg., Fungi Paulist., Rev. Mus. La Plata 3970 t. XV (1908) p. 22. — Maculis maximis repando-sinuosis, linea callosa fuscescente limitatis, amphigenis, cinereo-albescentibus, lineis pallidioribus subcircinantibus notatis; peritheciis sæpius epiphyllis laxissime gregariis, inordinatis, epidermide tectis, ostiolo papillulato pertuso perforatis 120-150 μ . diam.; membranaceis, contextu parenchymatico fusco-fuligineo; ascis antice longiuscule

attenuatis acute rotundatis crassiusculeque tunicatis, postice subrotundatis brevissime crasseque pedicellatis $55-60 \times 12$, octosporis; sporidiis ellipsoideo-elongatis, leniter inæquilateralibus, utrinque acutiuscule rotundatis, 20×4 , 3-septatis, hyalinis, oblique divel tri-stichis.

Hab. ad folia languida *Dracænæ* cujusdam in hortis, Sao Paulo, Brasilia (USTERI).

12. **Sphærulina? *Æchmæ*** Speg., An. Mus. Nac. Buenos Aires t. XIX 3971 (1909) p. 373. — Maculis sæpius hypophyllis suborbicularibus indeterminatis pallidissime olivascentibus; peritheciis innatis per epidermidem erumpentibus, subglobosis $100-120 \mu$. diam., glabris, atris, ostiolo latissimo 20μ . diam., impresso perforatis; ascis clavulatis paraphysatis breviter crassiusculeque pedicellatis octosporis, $60-80 \times 12-15$; sporidiis fusoidis primo continuis serius 1-3-septatis postremo obsolete 5-septatis, $20-28 \times 4$, semper hyalinis, per ætatem sæpius utrinque cauda (promycelio?) concolore brevioris ornat.

Hab. ad folia viva *Æchmæ* polystachyæ prope Formosa, Argentina Amer. austr.

13. **Sphærulina *Pleuropogonis*** Rostr. Rep. second. norweg. arctic 3972 Exped. Fram., in Vidensk. Selsk. i Kristiania (1906) pag. 7. — Peritheciis gregariis, vaginicolis, fuscis; ascis clavato-fusoideis, $55-65 \times 10-12$, aparaphysatis; sporidiis cylindraceis, utrinque obtusis, hyalinis v. pallide flavescentibus, $19-20 \times 5-6$, oblique monostichis.

Hab. in vaginis *Pleuropogonis* Sabinei, Fram's Fjord Norvegiæ.

14. **Sphærulina *subtropica*** Speg., An. Mus. Nac. Buenos Aires t. XIX 3973 (1909) p. 374. — Peritheciis sparsis lenticularibus, $120-150 \mu$. diam., subepidermicis, ostiolo umbilicato 30μ . diam. pertusis; ascis subfusoideis brevissime noduloseque pedicellatis, $75-80 \times 12$, semper plane aparaphysatis, octosporis; sporidiis subfusoideis, $16-20 \times 4-5$, sæpius leniter subnavicularibus, primo continuis dein 2-4-blastis, postremo 3-septatis, semper hyalinis.

Hab. ad glumas rachidesque *Paspali* dilatati in pratis prope Tucuman, Argentina Amer. austr.

15. **Sphærulina *Oryzæ*** Y. Miyabe, Pilze Reispfl. Japan, Journ. Col. lege Agricult. Tokyo, II (1910) p. 245, t. XIII, p. 12-14 (fig. 12 ex errore fucata). — Peritheciis nigro-brunneis immersis papilliformi-prominulis ibique obscurioribus, globosis v. ellipsoideis $65-125 \mu$. diam. $47-75 \mu$. altis; ascis numerosis, crebris, clavatis vel

elongatis plerumque subincurvatis, 40-60 \times 10-13, octosporis; sporidiis distichis, fusoides, utrinque acutatis, quadrilocularibus, non constrictis, 15-20 \times 3-5.

Hab. in foliis *Oryzæ sativæ* in Japonia.

METASPHÆRIA Sacc. — Syll. II p. 156, IX p. 825. XI p. 333, XIV p. 582, XVI p. 529, XVII p. 695.

1. **Metasphæria rubicola** Karst., Acta Soc. pro Fauna et Fl. fenn. 3975 XXVII (1905) p. 13. — Peritheciis gregariis, primo epidermide tectis, dein, ea secessa, liberis. sphæroideis, poro pertusis, atris, minutis; sporidiis longe fusoides, curvulis, 4-6guttulatis, hyalinis, circ. 40 \times 3.

Hab. in caulibus siccis *Rubi idæi* in regione Kuopioënsi, Kasurila Fennia (O. LÖNNBOHM).

2. **Metasphæria longispora** Kirschst., Verh. Bot. Ver. Brandenb 3976 XLVIII (1906) p. 54. — Peritheciis sparsis v. gregariis subcorticis sed cortice disrupta demum nudatis, sensim in ostiolum papilliforme tenuatis, nigris, coriaceis, usque ad 0,5 mm. diam.; ascis cylindraceo-clavatis, pedicellato-acutatis, supra rotundatis, 120-140 \times 5-7, octosporis; sporidiis hyalinis, elongato-fusoides, utrinque acutatis, multiseptatis (plerumque 10), non constrictis, 30-40 \times 4-5; paraphysibus filiformibus, hyalinis.

Hab. in sarmentis *Rubi fruticosi* prope Rathenow Potsdam Germaniæ.

3. **Metasphæria viticola** Speg., An. Mus. Nac. Buenos Aires t. XIX 3977 (1909) p. 377. — Peritheciis erumpenti-superficialibus valide papillato-ostiolatis, subconferte gregariis, seriatis, carbonaceis 150-180 μ . diam.; ascis clavulatis dense paraphysatis breviuscule pedicellatis, 90-100 \times 8-12, octosporis; sporidiis elongato-fusoides, 3-5-septatis, septo medio constrictulis, 18-22 \times 5, hyalinis, guttulatis.

Hab. ad sarmenta arida *Vitis cordifoliæ* in horto La Plata Argentina Amer. austr.

4. **Metasphæria Lonicæræ** Fautr. — Syll. IX p. 335, XI p. 333 - f. 3978 **Berberidis** Rehm in Jaap, Ann. Mycol. (1908) p. 211.

Hab. in ramistenellis *Berberidis vulgaris*, pr. S. Ulrich Tirolæ. — A typo in *Lonicera* morphologice vix differt.

5. **Metasphæria Dianthi** Rostr. Myk. Meddel. IX p. 311 (1905) in Bot. Tidskr. — Peritheciis sparsis, primo epidermide tectis, sphæroideis, atris 0,3 mm. latis; ascis tereti-clavulatis, breve stipitatis, paraphysatis, 70 \times 12-13; sporidiis oblique monostichis, oblongo-

fusoideis, 4-septatis, ad septa constrictis, 24-28 \times 7-8, hyalinis, loculis guttulatis.

Hab. in caulibus Dianthi superbi, Sjælland, Flaskekroen Dania.

6. *Metasphæria Lyndonvillæ* Fairman, Ann. Mycol. IV (1906) p. 328. 3980

— Peritheciis sparsis, erumpenti-superficialibus, minutis, atris; ascis clavatis, apice late rotundatis, breve stipitatis, octosporis, 60-75 \times 15-16; sporidiis distichis, oblongo-fusiformibus, rectis vel curvulis, 4-7-septatis, subconstrictis, loculis 1-2-guttulatis, 30-35 \times 6-7 μ ., hyalinis.

Hab. in interiore leguminum Robiniæ Pseudacaciæ, Lyndonville N. Y. Amer. bor.

7. *Metasphæria leguminosa* Fairman, An. Mycol. IV (1906) p. 328, 3981

fig. 4. — Peritheciis sparsis, minutis, superficialibus, atris; ascis oblongo-clavatis, breve stipitatis, paraphysibus sursum tenuiter clavulato-incrassatis, 8-sporis, 60-70 \times 15-18; sporidiis distichis, lanceolato-fusoideis, primo granulosi et nucleolatis, deinde 7-septatis, loculis intermediis incrassatis, hyalinis, 20-23 \times 3-4.

Hab. in interiore leguminum Robiniæ Pseudocaciæ, Lyndonville N. Y. Amer. bor.

8. *Metasphæria Mate* Speg., Ann. Mus. Nac. Buenos Aires t. XVII 3982

(1908) p. 126. — Peritheciis subepidermicis densiuscule gregariis, lenticularibus, glabris, subcarbonaceis, ostiolato-papillatis, 150 μ . diam.; ascis cylindraceis breviuscule pedicellatis, 120 \times 10, pseudo-paraphysibus paucis subfiliformibus granuloso-farctis commixtis; sporidiis elongato-ellipsoideis, triseptatis vix ad medium constrictulis, hyalinis demum subchlorinis.

Hab. ad ramos languidos Ilicis paraguariensis in silvosis circa Campo dos Cuias, Rep. Argentinæ Amer. austr.

9. *Metasphæria valdiviensis* Speg., Fungi Chilenses (1910) p. 73. — 3983

— Peritheciis numerosis, laxe gregariis, cortice insidentibus, epidermide velatis, lenticularibus, minutis, subcarbonaceis, ostiolo impresso perforatis, 150 μ . diam.; ascis subcylindraceis brevissime crassiuscule noduloseque pedicellatis, octosporis, paraphysatis, 85-90 \times 14-15; sporidiis hyalinis ellipsoideo-fusoideis, 3-septatis, ad septum medium constrictulis, mediocribus 26 \times 6.

Hab. in ramis siccis Perseæ Lingue, prope Ciudad de Valdivia, Chile Amer. austr.

10. *Metasphæria Coffeæ* Rehm, Ann. Mycol. VII (1909) p. 537. — 3984

— Peritheciis in epiphyllis dispersis, innatis demum convexo-pro-

minentibus, atris, poro pertusis, senilibus umbilicatis, sæpe margine tenuissimo nigrescente cinctis, 0,15 mm. diam.; ascis clavatis, apice rotundatis et incrassatis, 40-45 \times 15, octosporis, J-; sporidiis fusiformibus v. subclavatis, utrinque acutatis, 3-septatis, hyalinis, 15-20 \times 5, di-tristichis; paraphysibus filiformibus, septatis, 4 μ . cr.

Hab. ad folia Coffeæ arabicæ, Sao Leopoldo, Rio Grande do Sul Brasiliæ (THEISSEN S. J.). — Pseudostromate nigrescente ad *Hypospilam* nutat.

11. *Metasphæria ericina* v. Tubeuf, in Rehm, Ann. Mycol. V (1907). 3985 p. 541. — Peritheciis epiphyllis, gregariis, innatis, peridermio nigro tectis, globosis, poro conspicuo pertusis, glabris c. 250 μ . diam.; ascis oblongo-clavatis, sessilibus 80 \times 12-14, 8-sporis; sporidiis fusoidis, rectis, 3-septatis, ad septa subconstrictis, strato tenui mucoso obductis, hyalinis, 22-25 \times 6-7, distichis; paraphysibus ramosis, septatis, hyalinis.

Hab. ad folia decidua Ericæ carneæ, Seiser-Alpe Tirolæ austr. (Dr. v. TUBEUF).

12. *Metasphæria tetrasperma* Koord., Botan. Untersuch. (1907) p. 192, 3986 fig. 17, II. — Peritheciis corticulis, tectis, globosis, ostiolo conico erumpente, coriaceis, glabris, 0,5 mm. diam., sparsis, atris; ascis cylindræis 60 \times 5,5, tenui tunicatis, apice haud incrassatis, tetrasporis, paraphysatis; sporidiis oblique monostichis, hyalinis, fusoides-oblongis, utrinque acutis, 23-24 \times 5-6,5, triseptatis; paraphysibus ascos superantibus, filiformibus, vix 1 μ . cr., hyalinis.

Hab. in cortice vulnerato Fici elasticæ prope Karangaja in ins. Java (KOORDERS).

13. *Metasphæria vagans* Feltg., Vorstud. Pilzfl. Luxembg. Nachtr. 3987 IV (1905) p. 36. — Peritheciis gregariis cortice brunnescente insidentibus epidermide tectis, nigris, 100-150-200 μ .; ascis pisciformibus, octosporis, 54-70 \times 9-11, paraphysibus filiformibus obsitis; sporidiis fusoidis obtusulis, rectis v. curvulis, quadriguttulatis, uni- v. quadrilocularibus, ad septa non constrictis, 13-16 \times 3 (immaturis).

Hab. in cortice sicco Ilicis Aquifolii, Höhenhof Luxemburgia.

14. ?*Metasphæria nigrescens* (Bonord.) Sacc. et Trav. - Syll. XX, 3988 p. 78 - *Hercospora nigrescens* Bon. Handb. p. 63, t. III, fig. 72. — Peritheciis immersis, globulosis, discretis, ostiolo minuto erumpentibus, excipulo tenuissimo (nullo sec. Bon.) basi hypostromate

celluloso suffulto; ascis tereti-clavatis sensim tenuato-stipitatis, octosporis, apice rotundatis, paraphysibus ramosis obvallatis; sporidiis oblique monostichis oblongo-ellipsoideis, utrinque obtuse rotundatis, constricto-3-septatis, 4-guttulatis, hyalinis, dein in circum albidum expulsis.

Hab. in lignis, in Germania. Substantia lignea præcipue circa perithecia nigrescit. — Species dubia et vix *Metasphæria*.

15. *Metasphæria*? *Spegazzinii* Sacc. et Trott., *Metasphæria*? *Cocões* 3989

Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 375, non Petch — Peritheciis primo epidermide velatis eaque secedente denudato-subsuperficialibus, lenticularibus, 150-200 μ . diam., vix papillulato-ostiolatis, glabris; ascis subclavulatis breviter pedicellatis 100 \times 16-18, paraphysatis vel paraphysibus paucissimis cinctis, octosporis; sporidiis oblique distichis, primo didymis, biconoideis subnavicularibus, 4-guttulatis, 18-22 \times 5-6, serius triseptatis, medio præcipue constrictulis, eguttulatis, semper hyalinis.

Hab. ad spathas aridas *Cocões* Romanzoffianæ in hortis La Plata, Argentina Amer. austr.

16. *Metasphæria* *Cocoes* Petch, Ann. R. Bot. Gard. Peradeniya, IV 3990

Pt. V (1909) p. 304, non Speg. — Peritheciis 0,3 mm. diam., sphæroideis, gregariis, membranaceis, nigris, subcutaneis et epidermidem cinerescentem deique reticulatim sublevantibus; ostioliis minutis fere inconspicuis; ascis 260 \times 15, utrinque attenuatis, apice rotundatis, breviter pedicellatis, octosporis; paraphysibus nullis; sporidiis oblique monostichis, fusoideis, curvatis, utrinque obtusis, hyalinis, multiseptatis, 85-100 \times 5.

Hab. ad rhachidem foliorum *Cocões* nuciferæ, Ceylon.

17. *Metasphæria* *Scindapsi* Raciborski, Bull. Ac. Sc. Cracovie (1909) 3991

p. 389. — Maculis epiphyllis flavo-virentibus, subrotundatis, confluentibus, 2-5 cm. latis, non acute limitatis; peritheciis punctiformibus circinantibus, immersis, brunneis, 180 μ . diam., apice depressis, non prominentibus, minute ostiolatis; paraphysibus filiformibus demum mucosis; ascis breviter ovoideo-cylindræceis, basim versus crassioribus, apice angustatis obtusatis, medio 18-20 μ . lat., 70-80 μ . long., octosporis; sporidiis elongatis, levibus, hyalinis, quadrilocularibus, 38-42 \times 5, rectis v. curvulis, utrinque angustatis.

Hab. in foliis *Scindapsi* specierum scandentium ad Gedeh in ins. Java.

18. *Metasphæria* *Puyæ* Speg., Fungi Chilenses (1910) pag. 72, cum 3992

icon. — Peritheciis subepidermicis laxè gregariis lenticulari-sub-

conoideis, vix papillato-ostiolatis, parvulis, atris, submembranaceis, 130-150 μ . diam.; ascis sublanceolatis, apice obtusis, elongato-sterrilibus crasseque tunicatis, basi brevissime noduloseque pedicellatis, paraphysatis, 50-55 \times 16, octosporis; sporidiis subfusoides, parum infra medium septato-constrictulis, loculo supero transverse biseptato, infero minore sæpius 1-septato tantum, hyalinis, 20 \times 5-6.

Hab. in foliis emortuis, putrescentibus Puyæ cærulescentis, Cerro S. Cristobal de Santjago, Chile Amer. austr.

19. **Metasphæria Aloës** Trinchieri, Rend. R. Ac. Sc. Fis. Mat. Na. 3993 poli (1909) fasc. 3-4 martio-aprili, p. 88. — Peritheciis valde copiosis, dense gregariis, subcutaneo-erumpentibus, globosis vel globoso-depressis, atris, poro pertusis, 159-232,5 μ . diam., 159-208 μ . altis; excipulo crasso, duro, subcarbonaceo; ascis cylindraceutis, rarius cylindraceuto-clavatis, apice rotundatis, subpedicellatis, 8-sporis, 53,5-98 \times 9,5-14,5; sporidiis distichis, elliptico-fusoides, utrinque rotundatis, 3-5-septatis, ad septa, præcipue ad medium, fortiter constrictis, 17-24,5 \times 4,5-7, hyalinis, guttis 4-7-10 irregulariter dispositis, magnitudine varia; paraphysibus numerosissimis, manifestis, ascos subæquantibus, rectis curvulisque, basi breve articulatissimis incrassatisque, superne filiformibus acutiusculisque, hyalinis, 61-95,5 \times 4,5.

Hab. in scapis siccis Aloës plicatilis (L.) Mill., in Horto regio botanico neapolitano Ital. aust. (TRINCHIERI).

20. **Metasphæria Yuccæ** Earle, Bull. of the New York Bot. Gard. 3994 (1904) p. 293. — Peritheciis sparsis, nigris, prominentibus, longis, epidermide tectis, demum suberumpentibus, circ. 200 μ . diam., ostiolo inconspicuo, subpapillato; ascis ellipsoideis, circ. 75 \times 12; paraphysibus copiosis, filiformibus; sporidiis distichis, hyalinis, anguste ovoideis, apice acutis, 4-septatis, septis mediis fortiter constrictis, circ. 20 \times 6.

Hab. in foliis emortuis Yuccæ sp., Stanford Univ. Californ. Amer. bor. (C. F. BAKER).

21. **Metasphæria crassiuscula** Sacc. et Briard, Fl. de l'Aube p. 314, 3995 (1888), Berl. Icon. fung. I, p. 144, t. 160, fig. 3. — Peritheciis innatis, sparsis in areis pallidis plus minus approximatis, globulosis, $\frac{1}{6}$ - $\frac{1}{5}$ mm. diam., serius erumpentibus, breve papillatis; ascis crasse clavatis, brevissime noduloso-stipitatis, apice rotundatis, filiformi-paraphysatis, octosporis, 60-75 \times 20-24; sporidiis subdistichis, oblongo-ovoides, utrinque obtusis, 5-7-septatis, non v. vix constrictis, hyalinis, 22-26 \times 8-9, subinde inæquilateris.

Hab. in calamis putrescentibus Junci sp. pr. Gérosdot Gallie (P. HARTOT).

22. *Metasphæria sepalorum* Vleugel, Svensk Botan. Tidskr. II (1908) 8996 p. 369, fig. 2, *a*, *b*. — Peritheciis præcipue in pagina exteriori sepalorum dense gregariis, minutis, 0,4 mm. long. 0,3 mm. lat., sphæroideo-conoideis, papillatis, sessilibus, nigris, nitidis; ascis sphæroideo-cylindræis, sursum paullo incrassatis, 70-92 \times 9-14; sporidiis distichis, oblongo-ellipsoideis, utrinque rotundatis, inæquilateralibus, 4-locularibus, medio leniter constrictis, 20-24 \times 7-8.

Hab. in sepalis emortuis Junci filiformis, in insul. Holmön, Suecia.

23. *Metasphæria Lepidospermatis* Mac Alp. Austral. Fungi, Dec. I-II, 8997 p. 376 (Proceed. Linn. Soc. New. S. Wal. 1902). — Peritheciis dense seriatis, sæpius maculis nigris insertis, punctiformibus, nigris, membranaceis, poro pertusis, per stomata erumpentibus, 72 μ . diam.; ascis teneris fragilibusque, tereti-clavatis apice incrassatis rotundatisque, deorsum tenuatis, 86-90 \times 13-15, tenui-paraphysatis; sporidiis distichis elongato-fusoideis v. elongato-clavulatis, leviter curvis, typice 3-septatis, non constrictis, 25-26 \times 6,5-7, hyalinis demum submelleis, septo medio distinctiore.

Hab. in caule Lepidospermatis sp. Werribee Vic. Australiæ (C. FRENCH jun.).

24. *Metasphæria Staritzii* Rehm, Ann. Mycol. V (1907) p. 541. — 3998 Peritheciis gregariis immersis globulosis, glabris, nigris ostiolo minutissimo prominentibus, 100 μ . diam., contextu membranaceo fusco; ascis clavatis, 120 \times 15 octosporis; sporidiis fusiformibus rectis, transverse 5-7-septatis, haud constrictis, quaque cellula 1-guttata, hyalinis, 30-35 \times 6-7, distichis, paraphysibus paucis, septatis, 3 μ . cr.

Hab. ad folia Caricis hirtæ prope Ziebigk Dessau Germaniæ (STARITZ). — Pluribus speciebus caricicolis cognata, tamen ab omnibus bene distincta.

25. *Metasphæria Usteri* Spegazz., Fungi Paulist., Rev. Mus. La Plata 3999 t. XV (1908) p. 23. — Maculis amphigenis, primo totis obscure sanguineis, parvis, dein longiusculis 10-30 \times 2-4 mm., pallidioribus subindeterminatis, centro arescenti-pallescentibus; peritheciis amphigenis in centro macularum sparsis, primo epidermide tectis dein erumpentibus, subglobosis, 90-120 μ . diam., ostiolo minuto vix papillato perforatis, tenui-membranaceis; contextu dense minuteque parenchymatico fuligineo; ascis e cylindræo lenissime obclavulatis

60 \approx 12, apice obtuse rotundatis crasseque tunicatis, basi brevissime noduloseque pedicellatis, paraphysibus tenuibus longioribus densiusculis obvallatis; sporidiis oblique distichis, subfusiformibus, primitus subtorulosis grosse 6-guttulatis, dein 5-septatis, ad septum medium tantum constrictis, utrinque acutiusculis 20 \approx 4, hyalinis.

Hab. ad folia languida Sacchari officinarum in cultis, Ercilia Brasilæ (USTERI).

26. *Metasphæria arenaria* B. R. S. in Sacc., Not. Myc. VI, Ann. 4000

Myc. v. III (1905) pag. 509. — Peritheciis globosis, subcarbonaceis, seriatim erumpentibus, 300 μ . diam., dehiscentibus, basi hyphis repentibus parce septatis, fuliginosis, 4 μ . cr., elongatis, scarbris cinctis; ascis tereti-clavulatis noduloso-stipitatis, 90-150 \approx 14-16, octosporis; paraphysibus cohærentibus, articulatis, 5,5 \approx 7 μ . cr.; sporidiis distichis, lanceolato-fusoideis, initio 1-septatis, denique 3-septatis constrictisque, hyalinis, 39-42 \approx 6-6,5 loculis, 2-guttulatis.

Hab. in culmis Elymi arenarii, La Panne pr. Furnes et Knocke pr. Heyst, in Belgio (MARIA ROUSSEAU).

27. *Metasphæria Scirpi* Berl. Icon. Fung. I, p. 139, tab. 153, fig. 1, 4001

Sacc. Syll. II, pag. 59 (sub *M. vagans* Karst. f. *Scirpi* Sacc.) — forma *Phragmitis* Rehm, Ann. Mycol. V (1907) p. 541. — Peritheciis in maculis latis fusciculis gregariis primitus innatis, dein semigloboso-prominentibus, globulosis, nigris, glabris, contextu parenchymatico, 0,3 mm. diam., poro minutissimo pertusis; ascis clavatis, apice rotundatis 4-8-sporis, 100-110 \approx 20; sporidiis fusiformibus, rectis, subobtusis, hyalinis, 3-septatis, 40 \approx 6-7, distichis; paraphysibus subramosis, hyalinis, 3 μ . crassis.

Hab. ad culmos putrescentes *Phragmitis communis* in lacu Staffelsee prope Murnau alpium Baviaræ (Dr. REHM). — Præcipue a typo sporidiis eguttatis distincta.

28. *Metasphæria saccharicola* Speg., An. Mus. Nac. Buenos Aires 4002

t. XIX (1909) pag. 376. — Matrice tota sordide cinerescenti-infuscata; peritheciis laxè gregariis erumpenti-superficialibus subconoideis 150-180 μ . diam., minute sed acutiuscule papillato-ostiolatis; ascis subcylindræis, breviter pedicellatis 100-110 \approx 20, octosporis, paraphysibus paucis filiformibus obvallatis; sporidiis elongato-fusoideis, sæpius tristichis leviter curvulis, 45-50 \approx 7-8, 7-septatis, ad septa, ad medium validius, constrictulis, loculis grosse 1-guttulatis, diu hyalinis.

Hab. ad culmos dejectos putrescentes Sacchari officina-

rum in campis prope Ledesma, Argentina Amer. Austr. — Cum *Leptosphæria Spegazzinii* Syd. e Sacc. non comparanda.

29. *Metasphæria pamparum* Spegazz. An. Mus. Nac. Buenos Aires 4003 t. XIX (1909) p. 375. — Peritheciis innato-erumpentibus, in partibus sæpius arescenti-cinereis sparsis, subglobulosis 100–120 μ . diam., ostiolo carbonaceo non v. vix exerto coronatis; ascis cylindræis, abrupte in pedicellum brevissimum nodulosumque contractis, 60–70 \times 10–12, paraphysibus filiformibus longioribus parvis obvallatis, octosporis; sporidiis fusoides 20–22 \times 4, 7-septatis, tenuiter hyalino-tunicatis, guttulatis.

Hab. ad folia culmosque aridos *Aristidæ* cujusdam prope Colonia Juarez Celman Rep. Argentina Amer. austr.

30. *Metasphæria Equiseti* Jaap in Abhandl. Bot. Ver. Brandenb. LII 4004 (1910) p. 143. — Peritheciis gregariis, punctiformibus, nigris, immersis, epidermide tectis dein ostiolo prominentibus, globosis, 150–250 μ . diam., ostiolo obtuse conoideo; ascis cylindræo-clavatis, supra attenuatis obtusisque, sessilibus, 50–70 \times 8–9, tetrasporis; J –; sporidiis oblique monostichis, hyalinis, elongato-fusoides, 17–22 \times 4–5, bi-dein quadrilocularibus, guttulatis, loculo medio subbreuiore; paraphysibus hyalinis, septatis, curvis 3–6 μ . cr.

Hab. in caulibus vetustis *Equiseti* (*Heleocharidis*?) prope Triglitz in Germania. — Ob ascos tetrasporos prædistincta species.

31. *Metasphæria paulistana* Speg., Fungi Paulist., Rev. Mus. La Plata 4005 t. XV (1908) p. 23. — Maculis parvulis 3–4 mm. diam. determinatis suborbicularibus, ad hypophyllum sæpius epidermide vestitis, ad epiphyllum epidermide orbatis; peritheciis paucis in quaque macula, hypophyllis, e globoso-hemisphæricis, 120–150 μ . diam., papillulato-ostiolatis, contextu indistincte olivaceo; ascis antice attenuato-rotundatis, subcrassiuscule tunicatis, postice cuneatis, sensim in pedicello gracili attenuatis 60 \times 6–7, paraphysibus conspicue longioribus, gracillimis densiuscule obvallatis; sporidiis rectis v. oblique distichis, non v. levissime curvulis, polo supero obtusiore infero acutiore, 10–12 \times 2–2,5 ad septum non constrictis, primo 4-blastis dein triseptatis hyalinis.

Hab. ad folia languida coriacea ignota, Agua branca, Isolamento, Sao Paulo Brasilia (USTREER).

32. *Metasphæria javensis* v. Höhn., Stzb. K. Ak. d. Wiss. Wien 4006 CXVIII, Abt. I (1909) p. 328. — Peritheciis gregariis, immerso-prominentibus, subtus globosis supra conoideis, ostiolo rotun-

dato, nigris, 200-300 μ . latis, parietibus supra usque ad 40 μ . cr., nigro-brunneis, opacis, basi tenuioribus pallidis; paraphysibus numerosissimis filiformibus 2-3 μ . cr. non mucosis; ascis tenuiter tunicatis, medio latoribus supra subtruncatis, octosporis, basi in pedicellum breviter tenuatis, 110 \approx 12; sporidiis submonostichis, hyalinis, tenuiter tunicatis, elongatis, utrinque subangustatis rotundatisque, subsexlocularibus, medio tenuiter tunicatis, non constrictis, 24-26 \approx 6.

Hab. in cortice levi arborum, Tjiburrum prope Tjibodas in ins. Java.

34. *Metasphæria aquatica* Patouill., Bull. Soc. Myc. Fr. XXIV (1908) 4007 p. 10. — Peritheciis atris, innatis, globosis, circiter 120 μ . diam., ostiolo brevi obtuseque conoideo v. plus minus cylindraceo-elongato pertuso vix erumpente, tenuiter membranaceis carnosulis, pilis sparsis, brunneis, 3-4 μ . latis, septatis, flexuosis, mollibus, parenchymate thalli radiantibus vestitis; ascis cylindraceis, apice rotundatis deorsum attenuato-stipitatis 110-130 \approx 20, aparaphysatis, 8-sporis; sporidiis subdistichis rectis, fusoideis, hyalinis, utrinque obtusis, triseptatis, ad septa constrictis, 30-38 \approx 9-10, sæpius 4-guttulatis.

Hab. in thallo vivente *Lemaneæ*, Ain Juræ. — Cum statu pycnidico sæpe consociata.

35. *Metasphæria* (subg. *Sagediopsis* Sacc.) *nephromiaria* (Linds.) Sacc. 4008 et Trott., *Microthelia nephromiaria* Linds. Lichenic. Microf. pag. 539, t. XXIV, fl. 1-2. — Peritheciis punctiformibus, semi-immersis, nigris, globulosis, laxe gregariis; ascis fusoideo-saccatis, crebro filiformi-paraphysatis, octosporis; sporidiis laxe 2-3-stichis, oblonge fusoideis, rectis, utrinque obtusulis, 3-septatis, non constrictis, hyalinis, circ. 18-20 \approx 4-5.

Hab. in thallo et apotheciis *Nephromii cellulosi*, Hermte Island et *Neuropogonis Taylorii*, Kerguelen Island.

EUDARLUCA Speg., Fungi Paulist., Rev. Mus. La Plata t. XV (1908) p. 22 (Etym. *eu* bene et *Darluca*, h. e. status perfectus *Darlucæ*). — Perithecia e globoso lenticularia, parenchymatica, glabra, ostiolata; asci cylindracei, paraphysati, octospori; sporidiis cylindraceo-fusoideis, hyalinis v. fumosis, 2-septatis. — Genus pulchellum in *Uredinibus* (an semper?) parasiticum, statum ascophorum *Darlucarum* proferens.

1. **Eudarlucā australis** Spegazz. l. c. fig. E. — Peritheciis 3-5-gre- 4009
gariis erumpentibus, nigris, glabris, 80-100 μ . diam., impresso-
ostiolatis coriacellis, contextu circa ostiolum atro, opaco, ambitu
pellucido, minute denseque pseudoparenchymatico fuligineo (non
cyaneo!); ascis antice obtusis rotundatis crassiusculeque tunicatis,
postice breviter cuneatis in pedicellum brevissimum crassiusculum
productis, paraphysibus filiformibus longioribus obvallatis, 60 \approx 10,
octosporis; sporidiis oblique distichis, 16-20 \times 4, ad septa lenissime
constrictulis, loculo medio sæpius leniter tumidiore, primo hyali-
nis serius fumosis, utrinque acutiuscule rotundatis, rectis v. lenis-
sime inaequilateralibus.

Hab. in Uredine Cannæ Wint. ad folia Cannæ cujus-
dam in hortis Sao Paulo, Brasilia (USTERT).

MASSARINA Sacc. — Syll. II p. 153, IX p. 824, XI p. 332, XIV
p. 586, XVI p. 535.

1. **Massarina plumigera** (Ell. et Ev.) Sacc. et Trott., *Massaria plu-* 4010
migera Ell. et Ev. North Amer. Pyren. (1892) p. 404. — Peri-
theciis sparsis, depresso-globosis, 0,75 mm. circ. latis, subepider-
micis et ostiolo breviter conoideo v. cylindraceo subprominulis;
ascis oblongo-clavatis, breviter stipitatis, 130-150 \times 22-25, octo-
sporis, paraphysatis; sporidiis inordinatis, oblongo-cylindraceis,
hyalinis, 3-septatis, 55-60 \times 12.

Hab. in foliis emortuis Viburni Lentaginis, Newfield
N. Y. Amer. bor.

2. **Massarina polycarpa** (Füüst.) Sacc. et Trav. - Syll. XX, pag. 32, 4011
Massaria polycarpa Füüsting., in Bot. Zeitung (1868) p. 386, t. VII,
f. 3-4. — Peritheciis globoso-lenticularibus, immersis peridermio
pustulatim elevato tectis, 600-800 μ . lat., 400 μ . alt., non papil-
latis, sed ostiolo latiusculo erumpentibus; ascis clavatis, amplis,
150-200 \times 20, paraphysibus filiformibus copiosis obvallatis; spori-
diis subdistichis fusoides, 4-cellularibus, 30-36 \times 8-12, crassiuscule
tunicatis, hyalinis, loculis subæqualibus.

Hab. in ramis corticatis Coryli Avellanæ pr. Münster,
Germania.

3. **Massarina salicincola** Rehm, Ann. Mycol. IV (1906) p. 397. — 4012
Peritheciis arcte congregatis, sub epidermide longe fuscata innat-
is eamque hemisphærice elevantibus, papillula minutissima demum
prominente, globulosa, 0,3 mm. diam., glabra, excipulo submem-
branaceo, fusco, parenchymatice contextu; ascis cylindraceo-clava-

tis, apice rotundatis, crasse tunicatis, 90-120 \approx 14-16, octosporis; sporidiis fusoidis, triseptatis, ad septa subconstrictis, quaque cellula 1-2 magni-guttata, hyalinis, strato mucoso lato obductis, 18-24 \approx 5-7, distichis; paraphysibus filiformibus, septatis.

Hab. ad ramum emortuum Salicis sp., Dechbetten prope Ratisbonam Germania.

KOORDERSIELLA v. Höhn. Fragm. Mykol. VII (1909), Sitzb. K. Ak. d. Wiss. Wien, CXVIII, Abt. I, p. 833. - (Etym. a Doct. S. A. KOORDERS, stirpium javanicarum scrutatori). — Perithecia omnino superficialia, mollia, carbonaceo-coriaceo-carnosa, ostiolo distincto prædita; asci clavati paraphysati; sporidia hyalina, multiseptata.

1. **Koordersiella javanica** v. Höhn. l. c. p. 833. — Peritheciis solita- 4013
riis, sparsis, in hypothallo tenuissimo insidentibus, nigris, extus subcarbonaceis intus carnosocoriaceis, globoso-depressis subdiscoideis, 170-240 μ . latis, 120 μ . altis, extus verruculoso-rugosis; ostiolo depresso, 16 μ . lato, zona levi pallidiore circumdato; parietibus peritheciis pluries stratosi, parenchymaticis, intus hyalinis extus nigrantibus, 15-45 μ . cr., ascis tenuiter tunicatis, sessilibus, fusoido-clavatis, supra obtusulis crassiusque tunicatis, 4-8-sporis, 42-45 \approx 17; paraphysibus numerosis, crassis, ascos superantibus, mucosis; sporidiis distichis vel tristichis, tenuiter tunicatis, rectis v. vix curvulis, cylindraceo-fusoidis, utrinque rotundatis v. breviter acutato-apiculatis, hyalinis, 4-8-sporis, 24-28 \approx 4-6.

Hab. in foliis Urostigmatidis Vogelii, Tjeukumeh prope Buitenzorg in ins. Java. — In hoc gen., observante cl. v. Höhnel, inscribendæ sunt verisimiliter etiam *Winterina lobata* (Tr. et Earl.) et *W. acanthostigmoides* Rehm.

ZIGNOËLLA Sacc. — Syll. II p. 214, IX p. 860, XI p. 339, XIV p. 587, XVI p. 536, XVII p. 709.

1. **Zignoëlla anonicola** Speg., An. Mus. Nac. Buenos Aires t. XIX 4014
(1909) p. 376. — Peritheciis ligno denudato leniterque dealbato gregarie insidentibus, globulosis, 150-200 μ . diam., subprominulis ostiolo sublophiostomaceo donatis; ascis cylindraceis vix pedicellatis, 75-90 \approx 8-10, paraphysibus filiformibus vix longioribus obvallatis, octosporis; sporidiis ellipsoideo-biconoideis, didymis, triseptatis, eguttulatis, semper hyalinis, 15-20 \approx 5-6.

Hab. ad cicatrices ramorum Anonæ Cherimoliæ in hortis prope Tucuman, Argentina, Amer. austr.

2. **Zignoëlla Yerbæ** Speg., An. Mus. Nac. Buenos Aires t. XVII 4015 (1908) pag. 125. — Substrato sordide pallide irregulariterque fusco-nigrescente; peritheciis lenticulari-subconoideis 150 μ . diam., atris, glabris, levibus, opacis, basi insculptis, papillato-ostiolatis, carbonaceis; ascis fusosideo-clavatis modice attenuato-pedicellatis, 100-120 \times 14-15, octosporis, paraphysibus filiformibus longioribus cinctis; sporidiis subfusosideis oblique distichis, triseptatis, lenissime constrictis, hyalinis, sæpius leniter inæqualateralibus, 24-25 \times 8.
Hab. in ligno decorticato cicatricum truncorum *Ilicis* *paraguariensis* secus rivulum Matto Queimado, Argentina, America austr.
3. **Zignoëlla lichenoides** v. Höhn. Stzb. k. Ak. d. Wiss. Wien CXVIII 4016 Abt. I (1909) p. 331. — Peritheciis superficialibus, sed basi in stromate nigricante arcte adnato, tenuiter crustiformi insidentibus, seriatis v. solitariis, lateraliter unitis, sessilibus, globosis, coriaceo-carbonaceis, nigris, nitidulis, supra minute ostiolatis, 360-470 μ . lat. et altis, parietibus 50-60 μ . cr.; ascis numerosis, clavatis, stipitatis, supra rotundatis crasse tunicatis, 120 \times 13-14, octosporis, paraphysibus numerosissimis, ascos superantibus, ramosis, mucosis, crasse filiformibus; sporidiis hyalinis, subdistichis, crasse tunicatis, triseptatis, ellipsoideis, 22 \times 9, grosse quadriguttulatis.
Hab. in cortice ramorum *Albizziæ* *moluccanæ*, in horto botanico Buitenzorg in ins. Java: — *Z. omphalostomæ* Penz. et Sacc. et *Z. Cesalpinice* Zimm. affinis.
4. **Zignoëlla arthopyrenioides** Rehm in Hedwigia XXVIII (1889) 4017 pag. 355. — Peritheciis atris, sparsis, in superficie ligni dealbata sessilibus, hemisphaericis, rotundatis v. subcompressis, haud papillatis, poro perspicuo pertusis, 200-300 μ . diam.; ascis ovoideis v. clavatis, crassis, 50-60 \times 24-30, octosporis; sporidiis fusosideis, obtusis, rectis, 2-(4-) locularibus, grosse guttulatis, medio valde constrictis, hyalinis, 15-20 \times 6-7, distichis; paraphysibus filiformibus, 1,5 μ . cr., hyalinis; J.—
Hab. ad radices emortuas, decorticatas *Callunæ* vulgaris juxta Stuibenfall ad Plansee Tirolia.
5. **Zignoëlla ovoidea** (Fr.) Sacc. — Syll. II p. 215 - var. **subcorticalis** 4018 Feltg., Vorst. Pilz. Fl. Luxemb. IV (1905) pag. 69. — Peritheciis subcorticalibus (demum erumpentibus?) dignoscitur.
Hab. sub cortice *Betulæ*, Baumb.-Siebendbr. in Luxemburgia. — A *Z. subcorticali* Cooke diversa. — Var. **runsalensis** Karst. Symb. mycol. XIII, p. 6, Berl. Ic. fung. I, p. 99, tab. 91, f. 2.

— Peritheciis gregariis, minutis $\frac{1}{5}$ – $\frac{1}{4}$ mm. diam.; ascis 45–55 \times 8–10; sporidiis 14–18 \times 4–5. — In ligno quercino sicco, Run-sala Fenniae. Potius *Zign. punctiformi* affinis.

6. *Zignoëlla sinapisperma* (Rebenh.) Sacc. et Trav. - Syll. XX, 4019 p. 1172, *Sphaeria sinapisperma* Rabenh. in Hoffm. Icon. anal. fung. p. 98, t. 23, f. 1,6. — Peritheciis nigris, punctiformibus, nunc dense nunc laxè gregariis, globulosis, superficialibus, apice obtusis; ascis clavatis, breve stipitatis filiformi-paraphysatis, octosporis; sporidiis fusiformibus, utrinque attenuatis, medio septatis, non constrictis, hyalinis, 25 \times 4.

Hab. ramis in dejectis emortuis *Quercus* pr. Gross-Gerau Germaniae, socia *Phaeodiscula pezizoide* (Rabenh.) Sacc. et Trav. — Ubi sporidia semper didyma maneant potius *Melanopsamma*.

7. *Zignoëlla anceps* Sacc. Ann. Mycol. VI (1908) p. 564. — Peri- 4020 theciis laxè gregariis e basi adnata superficialibus, globoso-conoideis, obtusis, carbonaceis, nigris, glabris, breve papillatis et papilla amissa anguste perforatis, 300 μ . diam.; ascis cylindraceis, breve noduloso-stipitatis, apice obtusulis, 115–135 \times 18, octosporis; sporidiis distichis, fusoides, utrinque obtusulis, leniter curvis, 3-septatis, ad septum medium leviter constrictis, 4-guttulatis, hyalinis, 40 \times 10.

Hab. ad corticem radicis *Ostryæ virginicæ*, Lyndonville N. Y. (FAIRMAN). — Affinis *Z. sequanicæ* sed perithecia basi applanato-adnata, *Z. Sequojæ* sed maculae matricis nullae. Ad subg. *Trematostoma* spectat.

8. *Zignoëlla? claypolensis* Speg., An. Mus. Nac. Buenos Aires t. XIX 4021 (1909) p. 377. — Peritheciis dense aggregatis per peridermium irregulariter fissum erumpentibus, carbonaceis, glabris, 150–180 μ . diam.; ascis clavulatis breviter pedicellatis paraphysatis, octosporis, 80–90 \times 12; sporidiis distichis fusoides-biconoideis utrinque subacutiusculis, 20–25 \times 6, maturis 3-septatis, hyalinis (an postremo 5-septatis atque chlorinis?).

Hab. ad ramos aridos *Casuarinæ* strictæ, Claypole prope Buenos Aires, Argentina, America austr.

9. *Zignoëlla Abietis* v. Höhn., Stzb. k. Ak. d. Wiss. Wien, CXVIII, 4022 Abt. I (1909) p. 332. — Peritheciis superficialibus plus v. minus gregariis, sæpe plagulas late effusas formantibus, hyphis brunneis 3–4 μ . cr. intermixtis; peritheciis globosis, breviter conoideo-ostiolato-papillatis, carbonaceis, levibus, nitidulis, fragilibus, 180 μ . circ. latis, glabris v. basi setulis parcis, brunneo-violaceis, septatis, le-

vibus, obtusis, $200 \approx 3-4,5$ tectis; paraphysibus numerosis, filiformibus, tenuiter tunicatis, 3 μ . cr.; ascis clavatis, utrinque attenuatis, plerumque $80-90 \approx 10$, raro usque ad $120 \approx 8$, octosporis; sporidiis distichis, fusoideis, utrinque acutis, semper quadrilocularibus, hyalinis, quadriguttulatis, $26-32 \approx 3-4$.

Hab. in cortice putri Abietis in Wienerwalde Austriæ inf. — *Z. Britzelmayri*, *Z. crustaceæ*, *Z. macrosporæ* affinis. Status conidicus adest: *Acrotheca Zignoëllæ* v. Höhn. n. f.

10. *Zignoëlla palmicola* P. Henn., Engl. Jahrb. XXXVIII (1905) 4023 p. 126. — Peritheciis innato-superficialibus, gregarie sparsis, hemisphærico-conicis, obtuso-papillatis, cinereo-fuscis, c. $300-350 \mu$. diam.; ascis fusoideo-clavatis, apice tunicatis, subobtusis, octosporis, $90-110 \approx 7-10$, paraphysibus mycelioides, hyalinis; sporidiis oblique monostichis v. subdistichis, oblonge fusoideis, rectis vel curvulis, utrinque acutis, medio 1-septatis dein 3-septatis, hyalino-cyanescentibus, $30-40 \approx 4-5$.

Hab. in foliis Palmarum, Kamerun Africæ centr. (ZENKER).

11. *Zignoëlla texticola* Vouaux in Bouly de Lesdain, Bull. Soc. bot. 4024 France LVI (1909) p. 5. — Peritheciis gregariis, semiimmersis, nigris, $0,2-0,5$ mm. diam., poro simplici; ascis cylindræo-clavatis, breviter stipitatis, $80 \approx 10-11$, octosporis, paraphysatis; sporidiis elongatis, hyalinis, 4-guttatis, constricto-1-septatis, utrimque obtusiusculis, initio mucro crasso hyalino obvolutis, deinde nudis, $24-28 \approx 6-7$.

Hab. in tela cera illita, Versailles et tela bitumine illita in prato dejecta pr. Dunkerque Galliæ.

12. *Zignoëlla longispora* Rehm, Oesterr. Bot. Ztschr. LVI (1906) 4025 p. 294. — (Nomen nudum).

Hab. in ramulis siccis Rhododendri ferruginei, Alpeiner. - Alpe Stubai Austria.

MELOMASTIA Nits. et Fuck. — Syll. II p. 213, XVII p. 707.

1. *Melomastia shastensis* Earle, Bull. of the New York Bot. Gard. 4026 (1904) p. 292. — Peritheciis sparsis vel gregariis, ligno infossis plus minus compressis, nigris, collabescentibus, $0,3-0,5$ mm. cr., ostiolo depresso-perforato; ascis cylindræis, $70-80 \approx 10-12$; paraphysibus filiformibus; sporidiis subdistichis, irregulariter oblongis v. anguste ovoideis, hyalinis, 3-4-septatis, non constrictis, loculo medio sæpe leniter inflato, circ. $25 \approx 5-6$.

Hab. in ligno decorticato *Abietis shastensis*, Mt. Shasta Calif. Amer. bor. (COPELAND).

2. *Melomastia lignicola* Kirschst. in Jaap, Abh. bot. Ver. Prov. 4027 Brandenb. LII (1910) p. 139. — (Nomen nudum).

Hab. in ramis siccis *Betulæ albæ* prope Triglitz in Germania.

ORANIELLA Speg., An. Mus. Nac. Buenos Aires, t. XIX (1909) p. 378 (Etym. e loco *Oran*). — *Perithecia* sparsa cortice v. ligno omnino immersa, ostiolo papillato vix emergentia, majuscula; asci cylindranei, octospori, paraphysati; sporidia monosticha cylindracea 3-septata hyalina. — Genus *Melomastix* peraffine videtur.

1. *Oraniella coffeicola* Speg. l. c. p. 378, cum. icon. — *Peritheciis* 4028 globulosis 0,5-1,25 mm. diam.; ascis 180-250 \times 7-10; sporidiis cylindraneis, rectis v. vix inæquilateralibus v. subcurvulis, 24-30 \times 6-8, 3-septatis, ad septa omnia constrictulis, loculis grosse 1-guttulatis, semper hyalinis.

Hab. ad ramos vetustiores *Coffeæ arabicæ* prope Orán, Jujuy, Argentina, Amer. austr. — Jodi ope obturaculus minutissimus ascorum leniter cærulescit.

WINTERINA Sacc. em. — Syll. IX p. 909, XIV p. 589, XVI p. 538, XVII p. 708.

1. *Winterina peltigerophila* Rehm, Ann. Mycol. VI (1908) pag. 323. 4029 — *Peritheciis* in pagina superiore *Peltigeræ* dilutissime cinerescente vel nigrescente dispersis, sessilibus, atris, globulosis, poro minutissimo pertusis, contextu parenchymatico fusco, 100-150 μ . diam., glabris; ascis clavatis, apice rotundatis, 80 \times 15, octosporis; sporidiis fusoides, utrinque subacutatis, transverse 5-septatis, hyalinis, 20 \times 5 distichis; paraphysibus, tenerrimis, septatis, ca. 2 μ . crassis.

Hab. in superficie *Peltigeræ* in Germania. — Ex herb. Fückel in herb. Barbey-Boissier (sub *Abrothallo*). — Jodi ope hyemenium vinose rubens. — A *Leptosphaeria rivana* et *Metasphaeria leptogiophila* probe distinguenda.

ACANTHOSTIGMA De Not. — Syll. II p. 207, IX p. 854, XI p. 337, XIV p. 590, XVI p. 539, XVII p. 712.

1. *Acanthostigma Gnaphaliorum* Speg., An. Mus. Nac. Buenos Aires 4030 t. XIX (1909) p. 375. — Maculis nullis; peritheciis hinc inde la-

xissime gregariis, superficialibus, ex hemisphærico subconoides 70-125 μ . diam., nigris, setulis radiantibus v. erectis, unicellularibus fumosis 100-200 \times 4-5 subdensiuscule armatis; ascis cylindraceutis brevissimeque pedicellatis, octosporis, aparaphysatis, 50-55 \times 8-10; sporidiis oblique distichis, rectis v. lenissime subinequilateralibus utrinque acutiusculis 18-20 \times 3-4, 3-septatis, ad septa leniter constrictis, primo hyalinis serius obsolete fumosis.

Hab. ad folia viva *Gnaphalii purpurei* in pratis Ensenada prope La Plata, Argentina, Amer. austr.

2. **Acanthostigma rubescens** Rehm, Ann. Mycol. VII (1909) p. 536. 4031

— Peritheciis in maculis hypophyllis late rosaceis dispersis, inter pilos nidulantibus, folii conideo-globosis, imprimis versus apicem setis fuscis acutis, rectis, c. 30-40 μ . long. 3-4 μ . cr. obsessis, parenchymatice e cellulis permagnis fuscis contextis, 100 \times 90; ascis clavatis, ad apicem rotundatis, sessilibus, 45-48 \times 8-9, octosporis sporidiis fusiformibus, 3-5-septatis, hyalinis, 12-15 \times 3, distichis; paraphysibus filiformibus.

Hab. in foliis *Solani hypoleuci*, Sao Leopoldo Rio Grande do Sul Brasilæ (THEISSEN).

3. **Acanthostigma Lantanæ** Theiss., Beih. Bot. Centralbl. Bd. XXVII 4032

(1910) Abt. II, pag. 397. — Maculis nullis; peritheciis in hypophyllo numerosissimis dispersis, in epiphyllo rarioribus, globosis v. obovatis, inter pilos folii nidulantibus, grosse parenchymatice contextis, 200-240 μ . diam., papilla obtusa, hyphis longis, fuscis, flexuosis, septatis, 5-6 μ . crassis, hinc inde conidiferis obsitis; ascis clavatis, modice pedicellatis, p. sp. 85-120 \times 20-26, crasse tunicatis; sporidiis oblongis, maturis intense viridibus, 3-septatis, utrinque (imprimis apice infero) angustatis, ad septum medium constrictis, minus ad reliqua septa, uniguttulatis, polystichis, 32-45 \times 8-9.

Hab. in foliis vivis *Lantanæ*, Sao Leopoldo Rio Grande do Sul Brasilæ (H. DIECKMANN).

4. **Acanthostigma subnivale** Rehm, Ann. Mycol. V (1907) p. 539. — 4033

Peritheciis gregariis sessilibus, globulosis, ad basim hyphis fusciculis insidentibus, vertice setis plurimis, rectis, acutis, fuscis, 50 \times 5, vestitis, contextu parenchymatico, c. 300 μ . diam.; ascis clavatis, apice rotundatis, 70 \times 10-12, octosporis; sporidiis oblongo-clavatis, utrinque rotundatis, transverse 3-septatis, medio subconstrictis, hyalinis, 15 \times 5, distichis; paraphysibus ramosis.

Hab. in hypophyllo folii *Graminis* inter *Rhododendra*

ferruginea in alpibus supremis vallis Zillertal Tiroliae (Dr. REHM). — Affine *A. Alni* et *A. parasitico*.

5. **Acanthostigma Bambusæ** v. Höhn., Stzb. k. Ak. d. Wiss. Wien 4034

CXVIII, Abt. I (1909) p. 334. — Peritheciis superficialibus, plerumque singulis v. 2-5 gregariis, in maculis effusis nigricantibus, subvelutinis insidentibus, nigris, carbonaceis, nitidulis, globosis, supra rotundatis v. depresso ostiolato-papillatis, 210-280 μ . diam., ostiolo rotundato 20 μ . lato, supra levibus, basi setulis sparsis, nigris, septatis, obtusulis, apice pallidioribus 200-250 \times 6-7 tectis; paraphysibus numerosissimis, filiformibus, 4 μ . cr.; ascis octosporis, 100-130 \times 15-20, sessilibus v. brevissime noduloseque pedicellatis, tenuiter tunicatis, clavato-fusoideis, supra conoideo-angustatis obtusulis, J-; sporidiis distichis v. tristichis, hyalinis, plerumque 12-ocularibus, 51-54 \times 7, fusoideis, apice obtusulis.

Hab. in vaginis putrescentibus *Bambusæ* sp. in Hort. bot. Buitenzorg in ins. Java. — Status conidicus adest: *Acrothecium Bambusæ* v. Höhn.

6. **Acanthostigma genuflexum** (v. Höhn.) Sacc. et Trott., *Acantho-* 4035

stigmella genuflexa v. Höhn., Ann. Myc. III (1905) pag. 328. — Peritheciis superficialibus, sparsis, globosis v. globoso-ovoideis, tenui-membranaceis, nigro-brunneis, apice carbonaceis, 70-80 μ . lat., 100 μ . alt.; ostiolo setuloso, setulis 2-10 robustis, brunneo-nigris, acutis, septatis, 60-80 \times 4-5, raro levi v. subpiloso; ascis supra angustatis, clavatis, 30-35 \times 8, octosporis; sporidiis pluriseriatis, chlorinis, in massa pallide olivaceis, elongatis v. fusoideis, utrinque obtusule tenuatis, 2-septatis, loculo medio plerumque latiore, 8-14 \times 2-3,5.

Hab. in culmis putrescentibus *Phragmitis communis* prope Tulln Austriae inf. — Socium adest *Helicosporium Phragmitis* v. Höhn. forsan metagenetice connexum. — *Acanthostigmella* v. Höhn. a typo videtur vix recedere ostiolo particulatim setuloso.

7. **Acanthostigma orthosetum** (v. Höhn.) Sacc. et Trott., *Acanthostig-* 4036

mella orthoseta v. Höhn., Fragm. z. Mykol. VIII (1909) in Sitzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, p. 1201. — Peritheciis nigris, arcte gregariis, plerumque seriatis, superficialibus, 100-160 μ . latis, 100-120 μ . altis, infra globosis, tenuiter membranaceis, parenchymaticis, hyphis brunneis, septatis, 2-3 μ . latis tortuosis tectis, supra conoideis in discum 80 μ . latum subrotundum opacum desinentibus; ostiolo in centro disci subrotundo 15 μ . diam. præ-

ditis, setulosis, setulis circulariter pluriseriatis, 60-100 \approx 5-5,5, interdum brevioribus; ascis aparaphysatis copiosis tenui-tunicatis sessilibus, fusideo-clavatis, octosporis 40-52 \approx 8; sporidiis 2-3-seriatis ex hyalino pallide olivaceis, fusoides, utrinque acutis, quadricellularibus 4-5 guttulatis, non constrictis, 15-20 \approx 3-4, articulo uno v. binis intermediis paullo crassioribus.

Hab. in caulibus siccis *Heraclei* sp. ut videtur, Sonntagsberg Austria inf. (STRASSER).

8. *Acanthostigma glaciale* Rehm, Oest. Bot. Zeitschr. LVI (1906) 4037 p. 294. — (Nomen nudum).

Hab. in foliis Graminacearum, Zillertal sub Pfitscherjoch Tirolia. — An idem ac *Ac. subnivale* n. 4?

LASIOSPHÆRIA Ces. et De Not. — Syll. II p. 505, IX p. 969, XIV p. 638, XVII p. 576, XVII p. 790.

1. *Lasiosphæria subambigua* v. Höhnelt, Ergebn. Bot. Exp. Südbras. 4038 1901, Denk. k. Ak., d. Wiss. Wien, Bd. LXXXIII (1907), Extr. pag. 23. — Peritheciis superficialibus, gregariis, membranaceo-carbonaceis, supra subconoideis glabris, ceterum setulis acutis, nigris, opacis, 120 \approx 7-12, nonnullis brunneis translucidis, septatis, usque ad 160 \approx 6 immixtis crebre tectis, 350-400 μ . lat. 500-600 μ . altis, basi hyphis brunneis septatis 4-6 μ . cr. præditis; paraphysibus numerosis, filiformibus, mucosis; ascis clavatis, longe pedicellatis, 140-180 \approx 8, octosporis, supra obtusis et guttula pallida præditis; sporidiis distichis, in asco hyalinis, contortis, unilocularibus, extus maturantibus 2-4-locularibus, supra ellipsoideis brunneis, infra subhyalinis et vermiformi-incurvatis, utrinque breviter hyalino-appendiculatis, 40-44 \approx 4-5.

Hab. in stipite putri *Palmarum*, Alto da Serra prope Santos, Sao Paulo, Brasilia. — *Las. ambigua* Sacc. affinis.

2. *Lasiosphæria Rickii* Theiss., Beih. Bot. Centralbl. Bd. XXVII 4039 (1910) Abt. II, pag. 398. — Peritheciis gregariis, plerumque arcte aggregatis crustamque fere continuam efformantibus, sessilibus, globosis, 700-800 μ . diam., atris, asperis, verrucis crassiusculis conicis setosis obsitis, carbonaceis; setis sparsis ex hyphis fasciculatis, fuscis, 4-5 μ . cr., septatis compositis; ipsa peritheci cavitate c. 400-500 μ . diam.; ascis longe cylindræis, rarius subclavatis, apice angustatis et truncatis, lumine nodulose incrassato, inferius abrupte in pedicellum tenuissimum longiusculum productis, p. sp. 115-160 \approx 10-13 (rarius ventricosus c. 100 \approx 18); para-

physibus flexuosis filiformibus tenerrimis, 0,5-1 mm. cr., ascos superantibus, laxis; sporidiis oblique distichis v. polystichis, hyalino-flavidis, plerumque curvulis, oblongo-fusoideis, demum 3-septatis, non constrictis, 40-52 \times 4-5, supra rotundatis, infra breviter (3-5 μ .) acuteque hyalino-rostratis.

Hab. ad ramos emortuos, Sao Leopoldo Rio Grande do Sul Brasilæ (J. RICK).

3. *Laiosphæria? epimyces* Spegazz., An. Mus. Nac. Buenos Aires 4040 t. XIX (1909) pag. 403. — Peritheciis superficialibus densissime gregariis globulosis, 200-300 μ . diam., papilloso-squarrulosis, nigris; ascis fusoideis apice subtruncatis deorsum breviter attenuato-pedicellatis, 120-130 \times 15-18, octosporis, pseudoparaphysatis; sporidiis cylindræis 3-septatis, primo hyalinis dein fuliginæis, 50-55 \times 5-6.

Hab. ad hymenium nec non pileum Polypori radicati? in silva Bobadal Jujuy, Argentina, Amer. austr. — Species habitu sporarumque juvenilium fabrica eximie cum *Laiosphæria* conveniens sed sporidiis postremo deminutis fuliginæisque recedens et novi generis typum (*Aulospora epimyces* Speg.) certe sistens.

4. *Laiosphæria polyporicola* P. Henn., Hedw. XLV (1905) p. 28. — 4041 Peritheciis superficialibus, aggregatis vel sparsis, membranaceo-coriaceis, atro-fuscis, globulosis v. ovoideis, ruguloso-tuberculatis c. 250-300 μ . diam., pilis sparsis atro-brunneis, septatis, flexuosis, c. 3,5-4 μ . cr. vestitis; ostiolis obsoletis; ascis fusosideo-cylindræis, breve stipitatis, apice rotundato-applanatis, 8-sporis, 150-170 \times 12-18; paraphysibus copiosis mycelioideis, flexuosis, hyalinis, c. 1 μ . cr.; sporidiis subdistichis v. subtristichis, cylindræo-vermicularibus, utrinque rotundatis, interdum rostratis, hyalinis, pluriguttulatis, 3-septatis, 50-60 \times 4-6.

Hab. in Polyporo adusto prope Michailowskoe Rossia.

5. *Laiosphæria hirsuta* (Fr.) Ces. et De Not. — Syll. II, p. 191 — 4042 f. *parasitans* Rehm, Ascom. exsicc. fasc. 43 n. 1807 et Annales Mycol. VII (1909) pag. 136. — A typo differt peritheciis plus minus globosis, nec conoideis, pilis plerumque rectis, brunneis, nec acutis, usque ad 300 \times 5-6 tectis; sporidiis flavidis, denique brunneis, 8-ocularibus, 50 \times 5-6.

Hab. in Polyporo in trunco Pini, Weimar Ettersberg (DIEDICKE).

6. *Laiosphæria ambigua* Sacc. — Syll. II p. 197 — var. *carbonaria* 4043 Rick, Broteria IV (1905) p. 161. — Sporidiis junioribus ea *Bom-*

bardiae fasciculatæ, maturis vero ea *Sordariæ coprophilæ* imitantibus.

Hab. in areis carbonariis, Torres Verdas Lusitaniæ. — An potius *Sordariæ* sp.?

7. *Lasiosphæria aristata* (Quél.) Sacc. et Trav. — Syll. XIX p. 1053, 4044
Lasiella aristata Quél. Champ. Vosges, III (1875) p. 518, t. IV, f. 27. — Peritheciis conico-hemisphæricis, minutis, nigris, pilis rigidulis, divaricatis, nigris laxiusculis conspersis, ostiolo punctiformi; sporidiis cylindraceis, obtusis, triguttulatis, 8 μ . long.

Hab. in culmis exsiccatis graminum in Gallia. — Adsunt pycnidia: sporulis oblongo-fusoideis, guttulatis, utrinque aristatis. Species ex diagnosi et icone omnino dubia.

8. *Lasiosphæria culmorum* Miyake et Hara, Bot. Mag. Tokyo (1910) 4045 p. (337) [japonice].

Hab. in culmis *Bambusæ* sp. in Japonia.

9. *Lasiosphæria ovina* (Pers.) Ces. et De Not. — Syll. II, p. 199 — 4046
Huc, recte observante v. Höhn. Fragm. Myk. VIII (1909) p. 32 spectat *Heteronectria spirillospora* Penz. et Sacc. - Syll. XIV pag. 624. — Specimina vetusta, subdenudata, sæpe collabescentia hinc molliuscula visa, fucum fecerunt.

HERPOTRICHIA Fuck. — Syll. II p. 211, IX p. 856, XI p. 338, XIV p. 592, XVI p. 541, XVII p. 714.

1. *Herpotrichia alpincola* Rehm, Ann. Mycol. IV (1906) p. 338. — 4047
Peritheciis in maculis nigris, c. 2-3 cm. long., 0,5 cm. lat., gregariis sub epidermide nidulantibus eamque elevantibus, denique perrumpentibus et plerumque in cortice denigrato sessilibus, globosis, minute papillulatis, atris, basi hyphis permultis, sæpe perlongis, simplicibus, septatis, subfuscis, 4 μ . lat. conjunctis, 0,3 mm. diam.; ascis cylindraceo-clavatis, apice rotundatis, octosporis, 90-120 \times 10-20; sporidiis fusiformibus, utrinque subobtusis, transverse 1-3(-5) septatis, hyalinis, senescentibus interdum fuscidulis, 25-30 \times 5-8, strato tenui mucoso obductis, distichis; paraphysibus ramosis.

Hab. ad caules putrescentes *Aconiti* in alpibus editioribus Hungariæ et Transilvaniæ (LINHART, LOIKA). — A *Metasphæria rupicola*, æque aconiticola, probe distincta.

2. *Herpotrichia Boldoæ* Speg., Fungi Chilenses (1910) p. 65. — Pe- 4048
ritheciis ligno denudato insidentibus, subgregariis, subiculo olivaceo laxè gossypino absconditis, globosis vel cupulato-collapsis, mi-

nutis, ostiolo concolore vix papillato donatis, atris, coriacellis, 200-250 μ . diam.; ascis subcylindraceis, postice cuneatis brevissimeque pedicellatis, dense paraphysatis, 100 \times 14-16; sporidiis fusoides, rectis v. vix inæquilateralibus, submajusculis, hyalinis, medio 1-septato-constrictulis, primo 6-blastis (an mucro tenuiter vestitis?) dein 3-5-septatis, 37-40 \times 7-8.

Hab. in ramis emortuis putrescentibus *Boldoæ* fragrantis prope Talcahuano Chile, Amer. austr.

3. *Herpotrichia chilensis* Speg. Fungi Chilenses (1910) pag. 66, cum 4049 icon. — Peritheciis ligno denudato sparsis vel laxe gregariis, udis subglobosis siccis cupulato-collapsis, 200-250 μ . diam., nigris, vix papillulato-ostiolatis, membranaceo-coriacellis, basi hyphis radiantibus nonnullis olivaceis cinctis, 50-250 \times 5-6; ascis ellipsoideo-subclavulatis, breviter pedicellatis, dense paraphysatis, 80-100 \times 20, 4-6-8-sporis; sporidiis octonis subtristichis, fusoides inæquilateralibus hyalinis, 8-blastis, serius 3-5-septatis, 38-45 \times 7-9.

Hab. in ramis vetustis *Proustiae* pungentis prope Batuco, Chile Amer. austr.

4. *Herpotrichia Myriangii* Raciborski, Bull. Ac. Sc. Cracovie (1909) 4050 p. 384. — Peritheciis nigris, globosis, coriaceis, 190-240 μ . diam., apice depresso ostiolato-papillatis, papilla pallida 30-40 μ . alta, 40-60 μ . lata, superficie pilis crebris, curvulis, brunneis 30-90 \times 4-6 tectis; loculo peritheci globoso, 120-160 μ . diam., ascis e basi et e lateribus ad ostiolum convergentibus farcto; ascis clavatis, octosporis 55-64 \times 17-20; sporidiis rectis v. curvulis, brunneis, elongato-ovoideis, apice rotundatis, levibus, 14 \times 5, non constrictis, distichis; paraphysibus filiformibus.

Hab. in stromatibus *Myriangii* ad folia *Caricæ* *Papayæ* prope Buitenzorg Java.

5. *Herpotrichia tenuispora* Kirschst., Verh. Botan. Ver. Brandenb. 4051 XLVIII (1906) pag. 50. — Peritheciis gregariis, sessilibus, membranaceis, pilis longis, brunneis, incurvatis, septatis, 4 μ . cr. ob-
sitis, circ. 0,5 mm. diam., impresso-subglobosis, nigris; ascis anguste cylindraceo-clavatis, supra rotundatis, breviter pedicellatis, octosporis, 100-110 \times 6-7; sporidiis bi-v. polystichis, hyalinis, elongato-fusoides, guttulatis, indistincte 6-ocularibus, ad septa plus minus constrictis, loculo secundo v. tertio conspicue protuberanti, in ascis ipsis sæpe germinantibus, 26-35 \times 3; paraphysibus numerosis, hyalinis, filiformibus, ramosis.

Hab. in caulibus putrescentibus *Urticæ dioicæ*, Hasellake prope Gross-Behnitz Germaniæ.

6. *Herpotrichia rhodospiloides* Peck, Bull. Torr. Bot. Club XXXVI 4052 (1909) pag. 154. — Peritheciis gregariis, globosis, tomento effuso atro insidentibus, ad apicem subglabris, rufo-brunneis vel griseis, aliquando omnino atris, ostiolis obscure laceratis; ascis clavatis v. subcylindræis, 60-100 μ . longis, 10-12 μ . latis; sporidiis confertis v. subdistichis, oblongis, subfusoides, rectis v. subcurvatis, uniseptatis, hyalinis, maturis flavescentibus, 16-20 \approx 6-8; quaque cellula 1-2-septata.

Hab. in ligno decorticato *Populi deltoidis*, Batesville Arkansas Amer. bor. (EL. BARTHOLOMEW). — *Herp. rhodospilæ* (B. et C.) Sacc. proxima sed colore peritheciolorum et sporidiis uniseptatis diversa.

7. *Herpotrichia appendiculata* Kirschst, ap. Jaap in Verh. bot. Ver. 4053 Prov. Brandenb. LII (1910) p. 138. — (Nomen nudum).

Hab. in ramulis putrescentibus *Frangulæ Alni* prope Triplitz in Germania.

Sect. 7. Phæophragmiæ.

PHÆOSPHERIA I. Miyake, Pilze Reispfl. Japan (Journ. Coll. Agric. Tokyo, II, p. 246) (Etym. *phaios* ater et *Sphæria*, ob sporidia et perithecia atra). — Perithecia subcutano-erumpentia, typice foliicolæ, sphærellacea. Asci octospori aparaphysati. Sporidia 2-pluriseptata, oblonga, brunnea. — Genus cum plerisque speciebus mei gen. *Leptosphaerellæ* (Syll. II, p. 47, XIV, p. 19, n. 7) congruit; tamen cum nonnullæ hujus generis paraphysatæ videantur, genus Miyakeanum pro speciebus *aparaphysatis* adhiberi potest, dum *Leptosphaerella* Sacc. e. p. pro illis *paraphysatis* servanda est, quæ tunc a typo *Leptosphaeriæ* peritheciis membranaceis, minutis, foliicolis et sæpe maculicolis dignoscitur.

1. *Phæosphæria Oryzæ* I. Miyake, Pilze Reispfl. Japan. (Journ. Coll. 4054 Agricult. Tokyo, II (1910) p. 246, t. XIII, f. 15-17. — Peritheciis subcutaneis, poro vix papillato erumpentibus, subglobosis, brunneo-nigris, 70-125 μ . lat., 90-125 μ . alt.; ascis cylindræis, deorsum tenuatis, 35-55 \approx 7-9, apice rotundatis, 8-sporis; sporidiis distichis, fusoides, sæpe curvulis, 4-cellularibus, ad septa leniter contractis, sæpe minute pluriguttulatis, 16-23 \approx 4-5, flavo-atris.

Hab. in foliis glumisque *Oryzæ sativæ*, cui valde noxia, in tota Japonia. — Morbus japonice audit *Shiro-hagare-byo* (morbus albus).

2. **Phæosphaeria Bambusæ** Miyake et Hara in Bot. Mag. Tokyo (1910) 4055 p. (340) [japonice].

Hab. in *Bambusæ* sp. in Japonia.

LEPTOSPHERIA Ces. et De Not. — Syll. II p. 13, IX p. 762, XI p. 321, XIV p. 562, XVI p. 510, XVII p. 719. — *Leptosphaerella* (Sacc.) Speg. in posterum certe separanda, sed totius generis *Leptosphaeria* epicrisis præmittenda.

1. **Leptosphaeria Anemones** Hollós, Ann. Mus. Nat. Hung. IV (1906) 4056 p. p. 334, t. VIII, fig. 6. — Peritheciis sparsis, epidermide tectis, dein erumpenti-superficialibus, depresso-globosis, glabris, nitidis, nigris, ostiolo brevi cylindrico, 210-250 μ . diam.; ascis cylindraceo-clavatis, breve stipitatis, octosporis, 74-90 \times 8-10, filiformi-paraphysatis; sporidiis distichis v. interdum oblique monostichis, elongato-fusoides, rectis v. leviter curvulis, 6-septatis, flavidulis, 30-34 \times 3,5-4, loculo tertio superiore plerumque paullo crassiore.

Hab. in petiolis siccis *Anemones silvestris* prope Kecskemét Hungariæ. — A *Leptos. raphidophora* Hazsl. differt sporidiis majoribus 6-septatis nec 9-septatis.

2. **Leptosphaeria thalictricola** Hollós, Ann. Mus. Nat. Hungar. VII (1909) p. 51. — Peritheciis sparsis, epidermide velatis, depresso-globosis, breve papillatis, atris, glabris, 250-280 μ . diam., contextu celluloso; ascis clavatis, breve stipitatis, octosporis, 90-100 \times 8-11, filiformi paraphysatis; sporidiis 2-3-stichis, fusiformibus, curvulis, 7-septatis, 8-guttulatis, loculo tertio superiore inflato, 26-34 \times 3,5-4.

Hab. in caulibus siccis *Thalictri collini* prope Kecskemét Hungariæ.

3. **Leptosphaeria Thoræ** Jaap, Ann. Mycol. VI (1908) p. 210. — Peritheciis in maculis pallidis insidentibus, sparsis, nigro-brunneis, globosis, 200-250 μ . cr., late ostiolatis; ascis clavatis, supra rotundatis, stipite brevi, usque ad 10 μ . longo præditis, rectis v. curvis, 70 \times 14-16, dein usque ad 100 μ . elongatis, octosporis; sporidiis distichis, elongato-fusoides v. subclavatis, rotundatis, 4-locularibus, ad septa constrictulis, loculo secundo supero parum latiore, 18-24 \times 7-7,5, viridi-flavis; paraphysibus parvis, filiformibus, supra inflatis, hyalinis.

Hab. in foliis *Ranunculi Thoræ*, prope Eisenkappel in Karawanken Austriae. — Socia adest *Phyllostictæ* species.

4. **Leptosphæria andrijevicensis** Bubák, Bull. Herb. Boiss. 2 sér. VI 4059 (1906) p. 400. — Peritheciis sparsis v. hinc inde aggregatis, depressis, 250-400 μ . diam., nigris, primum epidermide tectis, dein collo conoideo erumpentibus, contextu obscure brunneo parenchymatico; ascis elongato-clavatis, rectis v. curvulis, 80-100 \times 9-11, basi sensim angustatis, breviter pedicellatis, octosporis, paraphysibus filiformibus numerosis, hyalinis obsitis; sporidiis fusoideis, supra distichis infra oblique monostichis, 22-26 \times 4-4,5, rectis v. curvulis, utrinque rotundatis, 7-septatis, loculo tertio superiore majori, brunneo-olivaceis.

Hab. in caulibus senioribus *Ranunculi Villarsii* pr. *Andrijevic*on sub Hasanac planina 1000-1400 m. alt., Montenegro.

5. **Leptosphæria inconspicua** Rehm, Oesterr. bot. Ztschr. LVI (1906) 4060 p. 296 (Nomen nudum).

Hab. in ramulis *Berberidis* prope Bärenbad Stubai Austria.

6. **Leptosphæria Pelargonii** Rehm, Hedwigia XLVII (1905) pag. 5, 4061 fig. 2 (ex errore *Pelagerinii*). — Peritheciis in maculis dealbatis exsiccatisque irregularibus, tenuissime fuscidule cinctis, sparsis, innatis, globulosis, nigris, ostiolo haud conspicuo, c. 100 μ . diam., membranaceis; ascis clavatis, apice rotundatis, 60-65 \times 8-9, octosporis; sporidiis cylindræis, utrinque rotundatis, transverse 3-rarissime 4-septatis, haud constrictis, cellulis oleoso-guttatis, subfuscis, 12-14 \times 3, in superiore asci parte distichis; paraphysibus ramosis, 2 μ . cr.

Hab. ad folia *Pelargonii* culti, Rio de Janeiro Amer. austr. (ULE). — *Lept. Tini* Ell. et Ev. et *L. Physalidis* Ell. et Ev. affinis, sed sporidiis rectis, obscurioribus, cylindricis diversa.

7. **Leptosphæria Lankeana** P. Henn., Verh. Bot. Ver. Prov. Brandb. 4062 XLVII (1905) p. 220. — Peritheciis sparsis v. gregariis, epidermide tectis dein erumpentibus, ostiolatis, ovoideis, atris, 180-200 μ . cr.; ascis clavatis 8-sporis, 90-120 \times 10-12, paraphysibus filiformibus septatis valde constrictis, hyalinis, 3-6 μ . cr.; sporidiis subdistichis interdum subtristichis, fusoideis, utrinque acutiusculis, 7-9-septatis, ad basim constrictis, primo hyalinis dein olivaceis, 25-40 \times 4-5,5.

Hab. in caulibus siccis *Hyperici perforati*, Hellmühle Germaniæ. — Socia adest *Diploceras hypericinum* (Ces.). A *Lept. Hyperici* Wint. etc. omnino diversa.

8. *Leptosphæria inquinans* Peck, New Y. St. Mus. Bull. 131 (1909) 4063 p. 22. — Peritheciis dense gregariis, subcarbonaceis, epidermide ostiolis nigris perforata tectis, globosis, $\frac{3}{4}$ mm. lat., nigris; ascis cylindraceo-clavulatis; sporidiis distichis v. confertis, cylindraceis, obtusis, plerumque curvis, 3-septatis, coloratis, loculis extimis subhyalinis, 16-24 \times 4-6.

Hab. in cortice *Aceris saccharini*, Vaughns Washington Co. Amer. bor. (S. H. BURNHAM).

9. *Leptosphæria Auerswaldii* Sacc. et Trav. — Syll. XIX, p. 1096 — 4064 *Sphærella leptosphærioides* Auersw. in Gonn. et Rabenh. Mycol. Europ. Heft. 5-6, p. 13, t. 7, f. 104. — Peritheciis amphigenis, atris, epidermide innatis, sparsis, exacte globosis, ostiolo cylindraceo brevissimo sed crasso, 20 μ . longo præditis, 120-140 μ . diam.; ascis oblongo-fusoideis, vix stipitatis, apice rotundatis, 55-66 \times 14, octosporis; sporidiis dense 3-4-stichis, oblongo-fusoideis, 3-septatis, ad septum medium constrictis, melleis, 30 \times 6, loculis singulis 1-2-guttulatis.

Hab. in utraque pagina et sepalis *Arenariæ ciliatæ* in Alpibus. — Paraphyses deesse dicitur, sed species ad gregem *Leptosphærellæ* certe pertinet.

10. *Leptosphæria Gypsophilæ* Hollós, Ann. Mus. Nat. Hung. V (1907) 4065 p. 45. — Peritheciis primum epidermide tectis, demum superficialibus, dense gregariis, depresso-globosis, breve papillatis, nigris, subcuticularibus, 300-400 μ . diam.; ascis cylindraceo-clavatis, breve stipitatis, 70-80 \times 8-10, filiformi-paraphysatis; sporidiis distichis, fusoideis, rectis subfalcatisve, utrinque leniter attenuatis, 3-septatis, ad septum medium constrictis, pluriguttulatis, flavidulis, 40-50 \times 3-4.

Hab. in caulibus siccis *Gypsophilæ paniculatæ*, prope Kecskemét Hungariæ.

11. *Leptosphæria ? Proliferæ* Feltg., Vorst. Pilz-Fl. Luxemb. IV (1905) 4066 p. 50. — Peritheciis gregariis in maculis pallidis indefinitis insidentibus, epidermide immutata omnino tectis, brunneis, globosis v. subdepressis, 0,1-0,15 mm. raro 0,3 mm. diam.; ascis clavatis, supra angustatis, breviter crasseque pedicellatis, paraphysibus filiformibus septatis obsitis, octosporis, 85-95 \times 16-18; sporidiis inordinate distichis, ellipsoideo-fusoideis, utrinque obtusis, rectis vel curvulis, triseptatis, ad septa constrictulis, flavidis, guttulis numerosis parvis raro nonnullis majoribus immixtis præditis, 22-28 \times 8-8,5.

Hab. in caulibus siccis Tunicae proliferae, Pulverm. Höhe et Garten Conrot Luxemburgia. — *L. Euphorbiae* affinis.

12. *Leptosphaeria eustoma* (Fr.) Sacc. — Syll. II, p. 61 — var. *le-* 4067
guminosa Fairman, Ann. Mycol. IV (1906) p. 327, fig. 2. — Peritheciis sparsis, minutis, erumpenti-superficialibus, subglobosis minutissime papillatis, atris; ascis cylindraneo-clavatis, breve stipitatis, apice rotundatis, paraphysibus filiformibus, octosporis, 60-75 \times 13-15; sporidiis distichis, oblongo-fusiformibus, rectis v. curvulis, 3-septatis, ad septa constrictis, uno loculo intermedio paullo crassiore, pallide flavis, 23-27 \times 6-7.

Hab. in interiore leguminum Robiniae Pseudacaciae, Lyndonville N. Y. Amer. bor.

13. *Leptosphaeria Lyndonvillae* Fairman, Ann. Mycol. IV (1906) p. 326, 4068
 fig. 1. — Peritheciis sparsis, erumpenti-superficialibus, depressoglobosis v. globoso-lenticularibus, minutissimis, atris; ascis cylindraneo-clavatis, breve stipitatis, apice late rotundatis, rectis vel curvulis, paraphysibus filiformibus, octosporis, 74-100 \times 10-12; sporidiis distichis (v. rarissime uniseriatis), clavatis, rectis, 6-9-septatis, loculo tertio superiore globoso-incrassato, apice rotundatis, deorsum in cellulas attenuatas desinentibus, sub-constrictis, primo guttulatis, 20-23 \times 6-7, luteo-fuscis.

Hab. in leguminibus Robiniae Pseudacaciae, in silvaticis Lyndonville N. Y. Amer. bor. — Ab affinibus *Lept. carpogena* et *Lept. rhopalispora* diversa.

14. *Leptosphaeria Yerbæ* Speg., Ann. Mus. Nac. Buenos Aires t. XVII 4069
 (1908) p. 126. — Peritheciis corticulis epidermide velatis, e globoso lenticularibus, subcarbonaceis, sparsis v. hinc inde plus minusve confertis, 90-150 μ . diam., ostiolo vix papillato perforatis; ascis clavulatis sursum subtruncato-rotundatis crasseque tunicatis, basi breviter cuneato-pedicellatis 50-60 \times 8-10, densissime paraphysatis, octosporis; sporidiis oblique distichis, elongato-ellipsoideis, 3-septatis, loculo secundo supero crassiore, chlorino-flavidis, 10-14 \times 3-4.

Hab. ad ramos languidos v. emortuos Ilicis paraguayensis in dumetis circa San Pedro Argentina Amer. austr.

15. *Leptosphaeria Trevoæ* Speg., Fungi Chilenses (1910) p. 79, cum 4070
 icon. — Peritheciis primo epidermide tectis dein nudis, gregariis v. subseriatis minutis lenticularibus atris, tenui-membranaceis, vix papillulato-ostiolatis, 250-300 μ . diam.; ascis linearibus breviter pedicellatis parce pseudo-paraphysatis, 4-6-8-sporis, 200 \times 12; spo-

ridiis subellipsoideis sæpius 3-septatis atque leniter curvulis, utrinque obtusis intense fuligineis, in asco tunica mucosa vestitis dein nudis, 20-30 \approx 10.

Hab. in ramis emortuis Trevoæ trinervis in collibus San Bernardo prope Santjago Chile Amer. austr.

16. **Leptosphæria Sanguisorbæ** Karst. apud Berl. Icon. fung. I, p. 78, 4071 t. 66, f. 4. — Peritheciis sparsis, $\frac{1}{8}$ mm. diam., globosis, tectis, ostiolo breviter papillato erumpentibus; ascis fusoides-clavatis, brevissime noduloso-stipitatis, octosporis, paraphysatis; sporidiis subtristichis, fusoides, curvulis, utrinque obtusulis et brevissime appendiculatis, 5-septatis, 32-35 \times 4-5, sordide flavis, loculo tertio subinde lenissime crassiore.

Hab. in caulibus Sanguisorbæ officinalis in Lapponia Rossica (KARSTEN).

17. **Leptosphæria Cercocarpi** Syd., Ann. Mycol. V (1907) p. 339. — 4072 Peritheciis epiphyllis, sparsis v. aggregatis, primo epidermide tectis, dein erumpentibus, applanato-globosis, ca. 175-225 μ . diam., atris, carbonaceis, obtuse papillatis; ascis oblongo-cylindraceis, sæpe curvulis, apice rotundatis, basi brevissime stipitatis, 70-90 \times 20-25, octosporis; sporidiis distichis, oblongis, utrinque rotundatis, 3-septatis, non v. leniter constrictis, flavo-olivaceis, cellula secunda vix crassiore, 26-28 \times 10-12.

Hab. in foliis emortuis Cercocarpi ledifolii, Mill. Creek Camyon, Salt Lake Co. Utah Amer. bor. (A. O. GARRETT).

18. **Leptosphæria Puttemansii** Maubl., Bull. Soc. Myc. Fr. (1905) p. 88, 4073 pl. VI, f. 3. — Maculis amphigenis, rotundatis, sæpe confluentibus, ochraceo-ferrugineis, linea angusta atro-fusca cinctis, usque ad 1 mm. latis; peritheciis nigris, plerumque epiphyllis, epidermide tectis, globulosis, 100 μ . diam.; ascis cylindricis, apice rotundatis, paraphysatis, 50-60 \times 10; sporidiis fusoides, utrinque obtusiusculis, 3-septatis, non constrictis, eguttulatis, fuligineis, 18 \times 5.

Hab. in foliis Eriobotryæ japonicæ in horto botanico Sao Paulo Brasiliæ. — Pycnidia peritheciis similia: sporulis ellipticis, hyalinis, 4-6 \times 2-2.5.

19. **Leptosphæria Lingue** (Speg.) Sacc. et Trott., *Leptosphaerella* ? Lingue Speg., Fungi Chilenses (1910) p. 77, cum icon. — 4074 Maculis nullis; peritheciis sparsis lenticularibus minutis, 100-120 μ . diam., parenchymate innatis, epidermide velatis, sæpius epiphyllis, atris, coriaccellis; ascis cylindraceis brevissime pedicellatis, 100-110 \times 10-

15; sporidiis ellipsoideis v. ellipsoideo-navicularibus, olivaceo-fulgineis 2-septatis, cellula centrali obscuriore, $15-20 \approx 6-7$.

Hab. in foliis dejectis putrescentibus *Perseæ* Lingue in silvis prope Cerro Caracol de Concepcion Chile Amer. austr.

20. **Leptosphæria Lauri** Maubl., Bull. Soc. Myc. Fr. (1905) p. 89, pl. VI, 4075 fig. 7. — Peritheciis hypophyllis, sparsis, globosis, nigris in maculis amphigenis superne albidis, inferne ochraceis, sinuosis, fusco-cinctis insidentibus; ascis cylindricis v. subclavatis, breviter pedicellatis, paraphysatis, $110 \approx 15$, octosporis; sporidiis distichis fusoides, rectis curvulisve, utrinque obtuse attenuatis, 3-septatis, ad septa leniter constrictis, enucleatis, luteolis, $25-30 \approx 6-8$.

Hab. in foliis *Lauri* nobilis, Seine-et-Marne Galliæ. — Socia adest *Phyllostictæ* sp. sporulis ovoideis, $6 \approx 3$, facile pycnidium *Leptosphæricæ*.

21. **Leptosphæria coniigena** Sacc. et Trott., *Leptosphæria Conii* Speg., 4076 An. Mus. Nac. Buenos Aires t. XIX (1909) p. 382, non Rostr. — Maculis nullis; peritheciis hinc inde gregariis primo tectis dein nudis sublenticularibus, $200-250 \mu$. diam, minute papillulato-ostiolatis; ascis subcylindraceis brevissime pedicellatis $70-75 \approx 10-12$, octosporis, pseudoparaphysibus dense obvallatis; sporidiis distichis ellipsoideo-subfusiformibus, 3-septatis, $16-20 \approx 5-6$, flavidis.

Hab. ad caules dejectos putrescentes *Conii* maculati in Silva Santa Catalina, Buenos Aires, Argentina Amer. austr. — *Lept. Dolioli* (Pers.) De N. nec non *L. conoideæ* De N. valde affinis, ascis sporidiisque conspicue crassioribus distincta.

22. **Leptosphæria Conii** Rostr. Mykol. Meddel. IX (1905) pag. 311 4077 (Bot. Tidsskr.). — Peritheciis serialiter dispositis, nigris, nitidis; ascis clavatis $80-85 \approx 10-13$; sporidiis elongato-fusoides, viridi-flavescentibus, 9-septatis, loculo quarto superiore, tumidiore, $40-50 \approx 5$.

Hab. in caulibus *Conii* maculato, Sjælland Køge Dania.

23. **Leptosphæria utahensis** Ell. et Ev. North Amer. Pyrenom. (1892) 4078 pag. 361. — Peritheciis sparsis v. subgregariis, subcuticularibus, basi fibrillosis, $150-175 \mu$. diam., e collapsu concavis, ostiolo minuto papilliformi præditis; ascis oblongo-cylindraceis, sessilibus, paraphysatis, $55-60 \approx 7-8$; sporidiis distichis, oblongo-fusoides, subinæquilateralibus, 3-septatis, utrinque obtusis, primum flavidis demum opacis, $15 \approx 3$, diu uniseptatis.

Hab. in ramulis emortuis *Umbelliferæ*? cujusdam, Pleasant Valley Utah Amer. bor. (S. J. HARKNESS).

24. **Leptosphæria Ellisiana** Berl., Icon. fung. I, p. 68, t. 55, f. 2, L. 4079

subconica Ell. et Ev. N. Amer. Pyren. n. 697, non C. et P. — Peritheciis sparsis $\frac{1}{4}$ - $\frac{1}{3}$ mm. diam. conoideis, tectis, prominulis, longiuscule et crassiuscule papillatis; ascis tereti-clavatis, brevissime noduloso-stipitatis, 110-120 \times 10-12, paraphysatis, octosporis; sporidiis distichis confertis, fusoides, leniter curvis, utrinque acutatis, 3-septatis, septo medio leniter constrictis, 32-35 \times 5-6, dilute olivaceis.

Hab. in caulibus emortuis *Oenotheræ* biennis, Newfield Amer. bor. — A *Lept. argentina* magnitudine sporidiorum imprimis distinguenda.

25. **Leptosphæria Francoæ** (Spegazz.) Sacc. et Trott., *Leptosphaerella* 4080 *Francoæ* Speg., Fungi Chilenses (1910) p. 77. — Maculis nullis; peritheciis laxè gregariis, globoso-depressis, pusillis, primo epidermide velatis, vix papillulato-ostiolatis, atris, glabris, membranaceis, 80-100 μ . diam.; ascis cylindræis aparaphysatis, brevissime crasseque pedicellatis, 40-42 \times 8; sporidiis ellipsoideo-subfusoides parvis, 3-septatis, non v. vix ad medium constrictulis, pallide olivaceis 12-15 \times 4.

Hab. in scapis siccis *Francoæ* sonchifoliæ, Bahia de Corral Chile Amer. austr.

26. **Leptosphæria Torrendii** Trav. et Spessa, Bol. Soc. Brot. XXV 4081 (1910) pag. 171, t. I, f. 3. — Peritheciis hinc inde subgregariis, epidermide initio tectis dein erumpentibus, globoso-papillatis, 140-200 μ . diam., nigris, contextu distincte sed minute pseudoparenchymatico, fuligineo; ascis cylindræo-fusoides, apice rotundatis, breve pedicellatis, 70-85 \times 8-11, paraphysibus filiformibus obvallatis; sporidiis subdistichis, oblongo-fusoides, plerumque curvulis v. inæquilateris, utrinque attenuatis, 3-septatis, ad septa vix constrictis, 16-29 \times 5 $\frac{1}{2}$ -7, dilute olivaceis.

Hab. in ramis siccis *Ricini* communis, pr. S. Bento Coimbra, IV 1903 (A. MOLLER).

27. **Leptosphæria Lythri** Peck, Bull. Torr. Bot. Cl. XXXIII (1906) 4082 p. 220. — Peritheciis minutis sparsis, depressis, epidermide rupta subtectis, nigris, ostiolo minute papilliformi præditis; ascis oblongis v. clavatis, 100-150 \times 20-30, subsessilibus; sporidiis oblongis v. subfusoides rectis v. curvulis, primum hyalinis dein flavido-brunneis, 5-7-septatis, cellula tertia cressiore, 30-40 \times 12-16.

Hab. in caulibus emortuis *Lythri* alati, Stockton Kans. Amer. bor. (E. BARTHOLOMEW).

28. **Leptosphæria chilensis** Speg., Fungi Chilenses (1910) p. 78. — 4083

Peritheciis subepidermicis, sparsis v. laxe gregariis, subglobulosis minutis carbonaceis atris 150-180 μ . diam.; ascis cylindraceis breviter pedicellatis, paraphysatis, octosporis, 150 \approx 10-12; sporidiis oblique monostichis fusoideis non v. leniter inæquilateralibus, olivaceis, mediocribus, 5-septatis, ad septum medium tantum constrictis, 25-30 \approx 7-8.

Hab. in ramis emortuis Lomatiae obliquae in silvis prope Cerro Caracol de Concepcion Chile Amer. austr.

29. *Leptosphaeria fuscella* (B. et Br.) Ces. et De Not. — Syll. II, 4084 p. 30 — Var. *Sydowiana* Sacc. in Sydow, Mycoth. germ. n. 485 et Ann. Mycol. IV (1906) pag. 484. — Sporidiis utrinque minus obtusis, olivaceis, 20 \approx 7; ascis 110-130 \approx 8-9.

Hab. in ramis Hippophaës rhamnoidis, Rüdersdorfer Kalkberge pr. Berolinum.

30. *Leptosphaeria Hippophaës* (Sollm.) Sacc., *Sphaeria Hippophaës* Sollm. 4085 Bot. Zeit. (1862) p. 379, tab. XII, f. 23. — Astromatica; peritheciis gregariis, subgloboso-depressis nigris, levibus, cortici interiori immersis, epidermide tectis, eamque hemisphaerice protrudentibus, ostioliis papillaeformibus, conicis (longiusculis) erumpentibus dein supra secedentibus et basim cupulaeformem relinquentibus; nucleo tenaci fulvo; paraphysibus deliquescentibus; ascis cylindricis 100 μ . longis, octosporis; sporidiis ellipsoideis, utrinque rotundatis, 3-septatis, ad septa non constictis, fulvis, 22-23 \approx 10.

Hab. in turionibus corticatis emortuis Hippophaës rhamnoidis, Coburg Germaniae. — Cl. Winter (Deutschl. Kr. Fl. II, p. 243, 882) ad *Melanomma Hippophaës* Fabr. refert, sed ob perithecia omnino tecta et ostiola longiuscula diversa species videtur. Species a Wintero relata vero est certe Sollmanniana.

31. *Leptosphaeria Azaleæ* Hollós, Ann. Mus. Nat. Hung. VI (1908) 4086 p. 529. — Peritheciis sparsis, epidermide velatis, depresso-globosis, atro-brunneis, ostiolo pertusis, 140-180 μ . diam., contextu celluloso; ascis clavatis, sessilibus, octosporis, 50-70 \approx 10-12, filiformi-paraphysatis; sporidiis biseriatis, fusoideis, rectis v. curvulis, 3-septatis, constrictis, loculo secundo superiore plerumque crassiore, luteolis, 18-20 \approx 5-7.

Hab. in ramis emortuis Azaleæ spec. in hortis, Kecskemét Hungariae.

32. *Leptosphaeria Physostegiae* Fairm., Proc. Rochest. Ac. of Sc. IV 4087 (1906) p. 216. — Peritheciis parvis, nigris, conicis, erumpentibus, sparsis v. gregariis; ascis oblongo-cylindraceis, 80-85 \approx 10; spori-

diis monostichis, 3-5-septatis, ad septa non v. leniter constrictis, pallide brunneis, oblongo-fusoideis, guttulatis, loculis mediis crassioribus, 20-26 \times 6-7.

Hab. in caulibus emortuis *Physostegiae virginianæ*, Lyndonville N. Y. Amer. bor.

33. *Leptosphæria substerilis* Peck, New York State Mus. Bull. 105 4088 (1906) p. 24. — Follicola; maculis minutis, 1-2 mm. lat., numerosis, suborbicularibus, sæpe confluentibus, plerumque sterilibus, brunneis v. nigricanti-brunneis, linea elevata cinctis; peritheciis paucis, 1-6 in quaque macula, epidermide velatis, nigris, inæqualibus; ascis subcylindraceis v. clavatis, basim versus tenuatis; sporidiis intra ascum confertis, triseptatis, subfusiformibus, coloratis, 25-30 \times 7.

Hab. in foliis vivis *Menthæ piperitæ*, Lakeport, Madison Co. Amer. bor.

34. *Leptosphæria Zahlbruckneri* Strasser, Verh. zool. bot. Gesellsch. 4089 Wien LVII (1907) p. 315. — Peritheciis nitidis nigris, membranaceis, minutis, primum ostiolo papillulato prominentibus dein liberis globosis; subiculo nullo; ascis cylindraceo-fusoideis, supra obtuse acutatis, 40-50 \times 6-8; sporidiis e hyalino flavidis, acute fusoides non appendiculatis, sæpe curvis, triseptatis, loculo secundo sup. majore, grosse guttulatis, medio fortiter constrictis, 12-16(-20) \times 3-4; paraphysibus filiformibus.

Hab. in caulibus siccis *Menthæ silvestris*, Sonntagberg Austriæ inf. (STRASSER). — *L. setosæ* Niessl. affinis sed sporidiis, ascis, subiculo distincta.

35. *Leptosphæria Periclymeni* Oud. — Syll. IX, p. 780. — var. *tatarica* Potebnia, Myc. St. in Ann. Myc. V (1907) p. 14, fig. 25 et Trav. Soc. Nat. Univers. Kharkow, XXXXVIII (1907) p. 62. — Peritheciis 200-220 μ . cr., pallide brunneis ostiolo brevi præditi; ascis 100 \times 17 longioribus quam paraphysibus; sporidiis pallide flavo-brunneis 26-28 \times 8-9, 3-septatis, constrictis.

Hab. in ramis vivis *Loniceræ tataricæ*, socia *Rhabdospora Xylostei*, Charkow Rossicæ.

36. *Leptosphæria Tupæ* Speg., Fungi Chilenses (1910) pag. 79. — 4091 Peritheciis laxè gregariis, epidermide velatis, lenticularibus, minutis, atris, vix papillulato-ostiolatis, 100-150 μ . diam.; ascis lanceolato-subcylindraceis parce paraphysatis, brevissime pedicellatis 100-120-10-12; sporidiis subellipsoideis, sæpius subnavicularibus, disti-

chis, chlorinis, ad maturitatem 3-septatis, ad medium constrictulis, 16-22 \times 5-7.

Hab. in pedunculis siccis Lobeliæ Tupæ prope Ciudad de Valdivia, Chile Amer. austr.

37. **Leptosphæria valdiviensis** Speg. Fungi Chilenses (1910) pag. 80, 4092 cum icon. — Peritheciis laxè gregariis v. subcæspitosis, epidermide sublevata tectis, globulosis carbonaceis atris glabris, minute papillulato-ostiolatis, 150-180 μ . diam.; ascis subcylindræis breviter pedicellatis paraphysatis, 70-80 \times 10; sporidiis distichis subacicularibus non v. vix inæquilateralibus sæpius 7-septulatis, ad septum medium constrictulis, loculis grosse 1-guttulatis, mediano supero cæteris parum crassiori, chlorinis, mediocribus, 28-38 \times 4-5.

Hab. in pedunculis emortuis putrescentibus Digitalis purpureæ prope Ciudad de Valdivia Chile Amer. austr.

38. **Leptosphæria Galii-silvatici** Kirschst., Verh. Bot. Ver. Brandenb. 4093 XLVIII (1906) pag. 56. — Peritheciis confertis sub peridermio nidulantibus, papilla prominentibus, depresso globosis, nigris, membranaceis, circ. 200 μ . diam., hyphis sparsis brunneis circumdatis; ascis clavatis, sessilibus, octosporis, 70-80 \times 8-10; sporidiis irregulariter 2-v. 3-stichis, fusoides, rectis v. curvulis, flavidis, 8-11-locularibus, supra conoideo-angustatis, ad septa non constrictis, 24-30 \times 4-5; paraphysibus filiformibus, 1-2 μ . cr.

Hab. in caulibus siccis Galii silvatici, Hasellake prope Gross-Behnitz Germaniæ.

39. **Leptosphæria Cynoglossi** Hollós, Ann. Mus. Nat. Hung. V (1907) 4094 pag. 455. — Peritheciis sparsis, superficialibus, depresso-globosis, glabris, nigris, 210-250 μ . diam., ostiolo brevi cylindrico; ascis cylindræo-clavatis, breve stipitatis, 6-8-sporis, 60-70 \times 8, filiformi-paraphysatis; sporidiis 2-3-stichis, elongato-fusoides, rectis v. leviter curvulis, 3-septatis, flavidulis, 30-32 \times 3,5-4, loculo superiore plerumque paullo crassiore.

Hab. in caulibus siccis decorticatis Cynoglossi officinalis prope Kecskemét Hungariæ.

40. **Leptosphæria Solani** Romell apud Berlese Icon fung., I, p. 63, 4095 t. 49, fig. 6. — Peritheciis sparsis, globoso-conoideis, tectis, $\frac{1}{2}$ mm. diam.; ascis tereti-clavatis, brevissime noduloso-stipitatis, octosporis, paraphysatis, 75-85 \times 9-11; sporidiis distichis, oblongis, utrinque obtusulis, 3-septatis, ad septa, præcipue medium constrictis, olivaceis, 14-16 \times 6-7.

Hab. in caulibus Solani Dulcamaræ in Gotlandia Sueciæ

(ROMELL in herb. Sacc.). — A *Lept. sociali* peritheciis multo majoribus imprimis differt.

41. *Leptosphæria acheniorum* Starb., in Arkiv för Botan. (1905) 4096 pag. 23 (ut var. *L. agnitæ*) t. I, f. 19 (*L. acheniorum*), extr. — Peritheciis minoribus, rugosiusculis, distincte conico-papillatis, 200-250 μ . diam.; ascis 82-90 \times 9-10; sporidiis tereti-fusiformibus, 6-septatis, ad medium constrictis, 33-35 \times 5.

Hab. in acheniis aridis Mikaniae sp. Tarija Boliviae.

42. *Leptosphæria perplexa* Sacc. et Fairm. in Saccardo, Microm. A- 4097 mer. novi, Journ. of Myc. v. XII (1906) pag. 49. — Peritheciis gregariis, epidermide initio velatis, mox liberis, globosis, basi applanatis, nigris, nitidulis, 250-300 μ . diam., ostiolo conico-acuto, tertiam peritheci partem subaequante praeditis, vetustis submuticis; ascis cylindraceis, breve stipitatis, filiformi-paraphysatis, 85-90 \times 10-11, octosporis; sporidiis breve fusoides, utrinque acutulis, curvulis, 3-septatis, non v. vix constrictis, 22-25 \times 5-6, flavido-olivaceis.

Hab. in caulibus emortuis Solidaginis sp., pr. Lyndonville, New York, Amer. bor. — A typica *Lept. doliolo* (in Angelica etc.) differt peritheciis fere dimidio minoribus et ostioli typice longioribus et acutioribus. Exemplaria in Dipsaco apud Rehm Ascom. n. 194 potius hanc speciem quam *Lept. doliolum* spectant.

43. *Leptosphæria agnita* (Desm.) De Not. et Ces. — Syll. II, p. 40 4098 var. *acheniorum* Starb., Ascom. Schwed. Chaco-Cordill. Exp., Arkiv f. Bot. Bd. V (1905) p. 23, fig. 19. — Peritheciis minoribus, rugosiusculis, distincte conico-papillatis, 200-250 μ . diam.; ascis 82-90 \times 9-10; sporidiis 33-35 \times 5.

Hab. in acheniis aridis Mikaniae, Tarija Boliviae. — A typo et varietatibus, inter quas praecipue var. *ambigua* Berl., quam maxime affinis, peritheciis minoribus, rugosiusculis nec non matrice recedit.

44. *Leptosphæria derasa* (Berk. et Br.) Auersw. — Syll. II, p. 41 4099 — f. *robusta* Strass., Verh. k. k. zool. bot. Gesell. Wien, LVII (1907) pag. 315. — A typo differt ascis sporidiisque constanter majoribus: ascis 100-120 \times 16; sporidiis 60-68 \times 4-5.

Hab. in caulibus siccis Senecionis nemorensis, Sonntagsberg Austriae inf. — Socia adest *Metasphæria Senecionis* Berl. —

45. *Leptosphæria papillata* (Bon.) Sacc et Trav. — Syll. XIX p. 1109, 4100 *Myriocarpium papillatum* Bonorden Abhandl. Myk. I (1870) p. 154, Syll. fung. XXII (VI-1912)

t. I, f. 24, non *Amphisphæria papillata* (Schum.). — Peritheciis laxè gregariis, hemisphærico-conoideis, vix 1 mm. diam., nigris, subsuperficialibus, in verticem tenuato-papillatis; ascis clavatis, apice rotundatis deorsum tenuatis breviterque stipitatis, octosporis, paraphysibus filiformibus ramulosis obvallatis; sporidiis distichis, fusiformibus, rectiusculis, utrinque acutulis, 5-6-septatis, ad septa constrictis, 5-guttulatis, brunneo-olivaceis.

Hab. in ramulis emortuis in Germania. — Forte est species quedam jam edita.

46. *Leptosphæria Massariella* Sacc. et Speg. — Syll. II, pag. 30 — 4101
var. *brasiliensis* Rehm, Ann. Mycol. V (1907) p. 528. — Peritheciis gregariis, sub epidermide haud mutata nidulantibus, demum in ejusdem rimis perspicuis, globulosis, ostiolo minutissimo prominente, poro pertusis, glabris, atris, ca. 0,35-0,4 mm. diam., contextu parenchymatico membranaceo, fusco; ascis cylindræis, 2-4-sporis apice rotundatis, crasse tunicatis, $130 \approx 15$; sporidiis ellipsoideis, rectis, 1-, dein 3-septatis, medio valde constrictis, flavofuscis, $25 \approx 10$; paraphysibus filiformibus, hyalinis, 2 μ . crassis.

Hab. in ramulo? Sao Paulo, Brasilia (USTERT). — A typo imprimis sporidiis majoribus et subquaternis dignoscitur.

47. *Leptosphæria cylindrostoma* Starb., Ascom. Schwed. Chaco-Cor- 4102
dill. Exp. in Arkiv f. Bot. Bd. V (1905) p. 23, fig. 18 a-b. — Peritheciis sparsim gregariis, matrice infossis, sphæroideis vel sphæroideo-lenticularibus, ad basim filamentis mycelialibus, flexuosis, repentibus parcissime obsessis, ostiolo cylindrico, longiusculo erumpentibus, atratis, c. 100 μ . diam.; ascis octosporis, cylindræo-clavatis, sursum rotundatis, deorsum fere sessilibus, $76-83 \approx 11-11,5$; sporidiis plerumque quatuor vel quinque superioribus distichis v. conglobatis, inferioribus oblique imbricatim monostichis, clavulatim ellipsoideo-oblongatis, inæquilateralibus vel fere curvulis, triseptatis, ad septa interdum lenissime constrictulis, loculis plerumque guttulatis, fuligineo-nigricantibus, $16,5-19 \approx 5-6,5$; paraphysibus simplicibus, filiformibus, hyalinis.

Hab. in caulibus (?) prope Laguna de la Brea, prov. Jujuy Argentinæ. — Peritheciis cylindræe et longiuscule ostiolatis, forma sporidiorum distincta videtur. Matrix non indicata.

48. *Leptosphæria acutiuscula* Berl. Icon. fung. I (1894) p. 86 (in textu) 4103
t. 80, f. 1 (sub *L. acuta*), *L. acuta* Rehm, non M. et N. — Peritheciis subgregariis, globoso-conicis, subcutaneo-erumpentibus, demumque liberis, $\frac{1}{2}$ - $\frac{1}{2}$ mm. alt., sursum longiuscule et obtusius-

seculæ acutatis; ascis cylindræis, prælongis, 156-165 \times 10-12, brevissime noduloso-stipitatis, paraphysatis, octosporis; sporidiis tetræti-fusoideis, 48-52 \times 4-5, rectis curvulisve, utrinque obtusulis. 10-12-septatis, loculis 4°, 5° et 6° paullo incrassatis, olivaceis.

Hab. in caulibus *Urticæ* in Germania (REHM).

49. **Leptosphæria Salsolæ** Hollós, Ann. Mus. Nat. Hung. IV (1906) 4104

p. 335. — Peritheciis dense gregariis, epidermide tectis, erumpentibus, depresso-globosis, atris, carbonaceis, corrugatis, 400-450 μ . diam., ostiolo minutissimo; ascis cylindræo-clavatis, brevi-stipitatis, 4-8-sporis, 80 \times 10-12, filiformi paraphysatis; sporidiis distichis, fusoideis, rectis v. leviter curvulis, utrinque leniter attenuatis, obtusatis, 5-septatis, flavidulis, 40-52 \times 6, loculis omnibus guttulatis v. eguttulatis, loculo tertio superiore semper crassiore.

Hab. in caulibus siccis *Salsolæ* Kali prope Izsak Hungariæ. -- A *Lept. Lecanora* H. Fab. differt sporidiis multo majoribus.

50. **Leptosphæria livida** Voglino, in Annal. R. Accad. Agricolt. To- 4105

rino, LIII 1910 (1911) p. 352. — Maculis sparsis, rhomboideis v. irregularibus, plerumque margine sinuosis, epiphyllis, albo-griseis, 1,2-4 mm. latis; peritheciis paucis, sparsis, minutis, punctiformibus, globosis, subimmersis, late pertusis; ascis clavato-oblongis, rectis, brevissime stipitatis, 60-70 \times 10; paraphysibus filiformibus; sporidiis distichis, fusoideis, 5-septatis, ad septa leniter constrictis, olivaceis, 24-26 \times 4.

Hab. in foliis vivis *Populi canadensis*, Santena, Villastellone, Pancalieri Italiæ bor.

51. **Leptosphæria Ephedræ** Maubl. Bull. Soc. Mycol. Fr. (1905) p. 88, 4106

pl. VI, f. 4. — Peritheciis minimis, sparsis, nigris, subglobosis, immersis 150-200 μ . diam.; ascis cylindricis, rectis vel curvulis, sessilibus, 65-75 \times 10-12, octosporis, filiformi-paraphysatis; sporidiis monostichis sæpius superius distichis, 3-septatis, medio constrictis, loculo superiore paullo latiore et apice leviter tenuato, inferiore obtuso, olivaceo-melleis, 14-16 \times 5-6.

Hab. in ramulis emortuis *Ephedræ* distachyæ in arenosis prope ostium Ligeris Galliæ, socia *Anthostomella Distachyæ*.

52. **Leptosphæria irrepta** Niessl in Linhart, Fungi Hung. exsicc. n. 64, 4107

c. ic. (1882). — Peritheciis epiphyllis nunc sparsis, nunc subgregariis, hemisphæricis, tectis, ostiolo conico apiceque erumpentibus coriaceo-duris, atris, glabris, nitidis; ascis clavatis in stipitem brevem attenuatis, 55-70 \times 9-10, octosporis; sporidiis distichis oblon-

go-lanceolatis utrinque obtusis breviterque appendiculatis, 4-guttatis, dein 1-septatis, postremo verisimiliter 3-septatis, ad septa, præcipue medium constrictis, e subhyalino fuscidulis, 14-16 \times 4; paraphysibus copiosis, simplicibus v. apice furcatis, filiformibus, ascos superantibus.

Hab. in foliis *Cycadis revolutæ* cultæ sub dio, Fiume.

53. **Leptosphæria Arecæ** Giuditta Mariani, in Atti Soc. it. Sc. nat. 4108

L (1911) pag. 165, fig. 2. — Peritheciis sparsis, globulosis, atris, erumpentibus, 150-200 μ . diam., contextu distincte pseudoparenchymatico, violaceo-fusco; ascis clavatis, breviter stipitatis, 55-70 \times 12-14, paraphysibus copiosis ascum sæpe superantibus obval-latis; sporidiis distichis, fusoideis, subcurvulis vel inæquilateris, 3-septatis, utrinque obtusis et appendicula crassiuscula, loculiformi, hyalina auctis, 25-28 \times 6-7, sine appendicibus 16-19 μ . longis.

Hab. in foliis languidis vel emortuis *Arecæ* sapidæ in Horto Botanico Conimbricensi Lusitaniæ (A. MOLLER). — Inter *Leptosphærias* palmicolas species valde distincta ob sporidia utrinque appendiculata. Sociæ adsunt: *Diplodia depazoides* Dur. et Mont. f. *Arecæ*; *Hendersonia Sabaleos* Ces. var. *Arecæ*, qui fungilli verisimiliter status secundarii sunt.

54. **Leptosphæria Molleriana** d'Almeida et da Camara, Bol. Soc. Bro- 4109

ter. XXIV (1908-1909), Extr. p. 18. — Peritheciis sparsis, epidermide tectis, globoso-depressis v. subglobosis, atris, poro pertusis, 200-250 μ . diam.; ascis obclaviformibus, sessilibus v. lenissime stipitatis, paraphysatis, 80-90 \times 12-13; sporidiis fusoideis, utrinque rotundatis, distichis, triseptatis, sæpe curvulis, melleis, 22-25 \times 6-7.

Hab. in foliis *Cocoës Romanzoffianæ*, in Horto botanico Coimbra Lusitaniæ (A. MOLLER). — A *Lept. Cocoës* facile distinguenda.

55. **Leptosphæria Desmonci** Syd., Hedwigia, XLIX (1909) p. 79. — 4110

Peritheciis globosis, 250-300 μ . diam., ostiolo minuto erumpente, atris, membranaceo-carbonaceis; ascis cylindraceo-clavatis, apice incrassatis, brevissime stipitatis, 70-160 \times 20-32, octosporis, copiose paraphysatis; sporidiis distichis, fusoideis, utrinque attenuatis, primo 1-septatis, hyalinis, tandem 3-5-septatis, flavidulis, loculo uno medio crassiore, medio constrictis, 42-60 \times 6-11.

Hab. in ramis *Desmonci*, Para Americæ austr. (C. F. BAKER).

56. **Leptosphæria parvula** Niessl. — Sacc. Syll. p. 169. — var. *Iridis-* 4111

germanicæ C. Mass., Novit. Fl. mycol. Veron. n. 291 et Osserv. fitol., in Madonna Verona v. II (1908) Extr. p. 10. — Ascis elon-

gato-clavatis 50-65 \times 10-14, paraphysibus filiformibus obvallatis, octosporis; sporidiis distichis, obscure olivaceis, fusiformi-oblongis, utrinque rotundatis, 1-3-septatis ad septa vix subconstrictis, 14-18 \times 6-7.

Hab. in foliis languidis Iridis germanicæ prope Tregnago in agro Veronensi Italia bor.

57. *Leptosphaeria Iridis* Hollós, Ann. Mus. Nat. Hungar. V (1907) 4112 pag. 45. — Peritheciis sparsis, parenchymate foliorum immersis, globulosis, nigris, ostiolo conico pertuso, 280-320 μ . diam., contextu parenchymatico; ascis clavatis, sessilibus, 200-280 \times 100-120, octosporis, paraphysatis; sporidiis inordinate distichis v. conglobatis, fusoides, 4-septatis, ad septa constrictis, dilutissime luteolis, 76-86 \times 18-26.

Hab. in foliis siccis Iridis arenariæ, prope Kecskemét Hungariæ.

58. *Leptosphaeria socialis* Berlese, Ic. fung. I (1894) p. 63, t. 49, f. 5. 4113 — Peritheciis sparsis v. subgregariis, tectis, globoso-conoideis, 120-130 μ . diam.; ascis paraphysatis, tereti-fusoides, brevissime noduloso-stipitatis, 60-65 \times 12-16, octosporis; sporidiis distichis oblongis, utrinque obtusulis, 3-septatis, leniter constrictis, fulvo-olivaceis, 15-18 \times 5-6, rectis.

Hab. in caulibus Asparagi officinalis in Fennia, sociis *L. præclara*, *L. Asparagi* et *L. punctoidea*.

59. *Leptosphaeria Alpinæ* Maubl. Bull. Soc. Myc. Fr. (1905) p. 89, pl. VI, 4114 f. 5. — Peritheciis minimis, immersis, atris, globosis, 100 μ . diam., sursum in collum crassum breve 25 μ . long., 30 μ . cr. desinentibus; ascis cylindrico-clavatis, rectis v. curvulis, breviter stipitatis, octosporis, 50 \times 8-10, paraphysatis; sporidiis distichis, fusoides, sæpe curvulis, 3-septatis, ad septa non constrictis, flavido-brunneis, 18 \times 4-5.

Hab. in foliis maculatis Alpinæ nutantis in horto bot. Sao Paulo Brasiliæ (PUTTEMANS).

60. *Leptosphaeria musicola* (Speg.) Sacc. et Trott., *Leptosphaerella musicola* Speg., An Mus. Nac. Buenos Aires t. XIX (1909) p. 382. — Maculis effusis indeterminatis sordide fuscescentibus; peritheciis innato-erumpentibus sparsis, atris, e globoso subpiriformibus, 120-125 μ . diam.; ascis obclavulatis, paraphysatis octosporis, breviter pedicellatis 60 \times 12; sporidiis subfusoides, 3-septatis, ad septa leniter, ad medium validius constrictis, olivaceis, 18-24 \times 6.

Hab. ad folia putrescentia Musæ paradisiacæ in arvis circa

Orán Rep. Argentina Amer. austr. — An a *Leptosphaeria Musarum* Sacc. et Berl. satis distincta?

61. *Leptosphaeria Cannæ* Mac Alp. Austral. Fung. Dec. I-II, p. 375 4116
(Proceed. Linn. Soc. New S. Wales, 1902). — Peritheciis sparsis, minutis, nigris, erumpentibus, depresso-globosis, membranaceo-coriaceis, poro apicali munitis; ascis elongato-clavatis, in basim attenuatis, octosporis, $90 \approx 20-21$; paraphysibus filiformibus copiosis ascos æquantibus; sporidiis distichis, fusoides, utrinque obtusis, olivaceis, 3-4-septatis, pro more curvulis et ad septa constrictis, $16 \approx 6,5-8$.

Hab. in pagina superiore albo-maculata foliorum *Cannæ* indicæ, Armadale pr. Melbourne Australiæ.

62. *Leptosphaeria maritima* Hollós, Ann. Mus. Nat. Hungar. V (1907) 4117
pag. 46. — Peritheciis epidermide velatis, sparsis gregariisve, depresso-globosis, fuscis, ostiolo papillato perforato, $180-230 \mu$. diam., contextu parenchymatico; ascis ellipsoideis v. clavatis, breve stipitatis, apice rotundatis et incrassatis, octosporis, $80-110 \approx 26-32$; sporidiis 2-3-stichis, fusoides, rectis v. curvulis, 3-septatis, non v. vix constrictis, flavo-brunneis, $42-52 \approx 10-14$.

Hab. in caulibus et foliis siccis *Triglochinis maritimi*, prope Izsák Hungariæ. — A *Leptosphaeria triglochinicola* Curr. et L. *Triglochinis* Sacc. diversa.

63. *Leptosphaeria Rusci* (Wallr.) Sacc. — Syll. II, p. 74. — Var. *Hypophylli* Maire, in Bull. Soc. bot. France, LVI (1909) [ed. 1911] p. CCLXXII, f. 3. — A typo differt sporidiis pro more 3-septatis, nec 4-septatis, majusculis: nempe $28-35 \approx 6,5-7$, nec $17-25 \approx 4-5$.

Hab. in cladodiis emortuis *Rusci Hypophylli* in Tunisia. — *Lept. ruscicola* Karst. et Har. — Syll. IX, p. 785. — sec. cl. Maire l. c. et juxta exempl. orig. dignoscitur peritheciis duplo majoribus, $300-400 \mu$., sporidiisque 1-3-septatis, $24-28 \approx 4-5$.

64. *Leptosphaeria Muscari* Hollós, Ann. Mus. Nat. Hungar. VII (1909) 4119
pag. 51. — Peritheciis sparsis v. gregariis, epidermide tectis, depresso-globosis, glabris, nitidis, nigris, ostiolo papillato erumpente, $250-280 \mu$. diam., contextu celluloso; ascis clavatis, breve stipitatis, octosporis, $64-70 \approx 10-12$, filiformi paraphysatis; sporidiis distichis v. interdum oblique monostichis, cylindraceo-oblongis, utrinque rotundatis, curvulis, 2-septatis, ad septa constrictis, 3-guttulatis, flavidulis, demum brunneis, $16-18 \approx 6-7$.

Hab. in caulibus siccis *Muscari comosi* prope Kecskemét Hungariæ.

65. *Leptosphæria Baldratiana* Bacc., Funghi Eritrea, Ann. Bot. IV 4120 (1906) p. 274. — Peritheciis minutis; ostiolo prominulo; sub epidermide nidulantibus, in maculis aridis, arcu limitatis, sparsis, $\frac{1}{2}$ mm. et ultra latis; ascis clavulatis $76 \approx 12$, paraphysatis, paraphysibus filiformibus; sporidiis distichis, ellipsoideis transversim 5-6-septatis $23 \approx 5$, hyalinis.

Hab. in foliis Sansevieriæ Ehrenbergianæ in montibus Arbaraba et Mahdet Erythrææ (PARRI).

66. *Leptosphæria Cordylines* (Speg.) Sacc. et Trott., *Leptosphaerella* 4121 *Cordylines* Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 381. — Maculis nullis; peritheciis amphigenis adnatis sparsis v. laxissime gregariis e globoso conoideis 100-125 μ . diam., ostiolo papillulato perforante præditis; ascis obclavulatis subsessilibus 55-65 ≈ 10 -12, aparaphysatis, octosporis; sporidiis fusoides, di-tristichis, 22-24 ≈ 5 -6, flavidulis.

Hab. ad folia arida *Cordylines* dracænoidis in horto Santa Catalina Buenos Aires Rep. Argentina, Amer. austr.

67. *Leptosphæria petkovicensis* Bubák et Ranojevic, Ann. Myc. VIII 4122 (1910) p. 361. — Peritheciis in caulibus æque distributis, globosis, papilla conoidea prominenti præditis, dein parum apertis, nigris, 100-200 μ . diam., contextu parenchymatico obscure brunneo; ascis elongatis, utrinque angustatis, supra rotundatis et incrassatis, infra in pedicellum crassum attenuatis, 65-80 ≈ 15 -20; sporidiis fusoides, rectis vel curvulis, utrinque attenuatis, 3-septatis, ad septa non constrictis, 38-50 ≈ 4 -5, pallide flavo-stramineis; paraphysibus filiformibus.

Hab. in caulibus siccis *Junci* effusi prope Petkovica, Serbia (SR. DOZUDIC).

68. *Leptosphæria Schneideriana* (Rick) Rick in litt., *Trematosphæria* 4123 *Schneideriana* Rick Broteria V (1906) p. 47. — Peritheciis majusculis, 1 mm. diam., atris, immersis, dein semi-immersis, orbiformibus, obtuse ostiolatis, rugosis, carbonaceis; ascis 170-250 ≈ 30 -40 (parte spor.), tenuiter tunicatis, octosporis; sporidiis multiserialibus, curvulis, fusoides, primitus hyalinis, denique fuliginis, 3-septatis, 50-60 ≈ 12 (in medio), in septo vix constrictis, cellulis interioribus æqualibus, exterioribus attenuatis; paraphysibus conglutinatis, indeterminatis, stratum mucosum validum ascos superantibus formantibus, hyalinis v. viridulis.

Hab. in *Bambusa*, Rio Grande do Sul Brasilæ. — *Leptosph. arundinaceæ* (Schw.) Sacc. similis.

69. *Leptosphæria eremophila* (Speg.) Sacc. et Trott., *Leptosphaerella* 4124
eremophila Speg., An. Mus. Nac. Buenos Aires t. XIX (1909)
 p. 381. — Maculis nullis v. melius substrato fere toto sordide are-
 scentia-cinerescente; peritheciis globulosis 70-80 μ . diam., sparsis,
 parenchymate innatis, sæpius ad hypophyllum leniter prominulis
 atque ostiolo vix papillato subfimbriato epidermidem perforante
 sed non exerto nigro manifestis; ascis subclavatulis subsessilibus
 v. minutissime pedicellatis, 38-40 \times 8, octosporis aparaphysatis;
 sporidiis subfusoidis, sæpius inæquilateralibus, 3-septatis, 15 \times 4,
 ad septum medium tantum constrictis, hyalinis v. chlorinis.
Hab. ad folia arida Sporoboli asperifolii in pratis circa
 Mendoza Rep. Argentina Amer. austr.
70. *Leptosphæria intermedia* Niessl, Hedw. XXVI (1887) p. 46-48, 4125
 fig. 3 (sporidia). — Peritheciis et ascis non descriptis; sporidiis
 fusoidis, rectis, utrinque acutulis, 5-septatis, 6-guttulatis, ad septa
 constrictulis, coloratis.
Hab. in culmis Calamagrostidis sp. et Sorghi hale-
 pensis in Moravia, Rhenogovia et Hungaria. — *Lept. Fuckelii*
 et *Lept. ogilviensi* affinis. Postremæ habet sporidia similia, sed bre-
 viora et crassiora.
71. *Leptosphæria Sparti* Fl. Tassi, Bull. Lab. Ort. Bot. Siena (1905) 4126
 p. 60, tab. I, fig. 1-4. — Peritheciis seriatis, epidermide velatis
 tandem erumpentibus, globoso-depressis, nigris, 150-200 μ . diam.,
 anguste pertusis; ascis elongato-clavulatis 60-70 \times 10-12, apice ro-
 tundatis, brevissime stipitellatis, paraphysibus, æquilongis, 4-5 μ ,
 crassis obvallatis, 8-sporis; sporidiis distichis, oblongis, rectis vel
 curvulis, 2-septatis ad septa constrictis, loculo medio subgloboso
 paullo crassiore, eguttulatis, flavidis, 16-18-20 \times 7-7,5-8.
Hab. in culmis vaginisque Lygei Sparti in horto botanico
 Senensi Italiæ. — Verisimiliter statui escophoro spectant formæ
 inferiores ad genera *Diplodinula*, *Stagonosporina*, *Microdiplodia*,
Hendersonulina, *Stagonospora*, *Hendersonia* pertinentia, teste Tassi.
72. *Leptosphæria cumulata* Kirschst., Verh. Bot. Ver. Brandenburg 4127
 XLVIII (1906) pag. 56. — Peritheciis arcte confertis, globosis,
 nigris, mollibus, basi hyphis brunneis obsitis, ostiolo punctiformi
 prominulis, v. omnino immersis; ascis elongato-clavatis, supra ro-
 tundatis, breviter pedicellatis, 105-120 \times 8-10, octosporis; sporidiis
 cylindræis, primum hyalinis, dein flavis, usque 12-locularibus,
 loculo tertio globoso prominenti, distichis v. oblique pluries seria-
 tis, rectis, guttulatis, 40-50 \times 3-4; paraphysibus filiformibus.

Hab. in culmis putrescentibus Phragmitis, Gross-Behnitzer See Germaniæ. — A *L. graminis* (Fuck.) peritheciis immersis, ascis sporidiisque minoribus angustioribusque diversa.

73. *Leptosphæria lwamotoi* I. Miyake, Pilze Reispl. Japan (Journ. 4128

College Agricult. Tokyo, II (1910) p. 249, t. XIII, f. 18-19. — Peritheciis globosis immersis papilliformi-prominentibus, obscure brunneis, 75-125 μ . diam.; ascis elongato-cylindraceis, 55-60 \times 11-13, octosporis, paraphysibus æqualiter incrassatis dimidiam asci partem vix æquantibus; sporidiis distichis, ellipsoideis, brunneis, biseptatis, ad septa constrictulis, granuloso-farctis, 12,5-18 \times 3,7-5.

Hab. in foliis Oryzæ sativæ in Japonia.

74. *Leptosphæria Spegazzinii* Sacc. et Syd. — Syll. XIV p. 570. — 4129

var. *minor* Spegazzini, An. Mus. Nac. Buenos Aires t. XIX (1909) p. 383. — Peritheciis 100-120 μ . diam., ascis 60-65 \times 10; sporidiis 16-18 \times 4-4,5.

Hab. ad culmos Sacchari officinarum prope Ledesma, Jujuy, Argentina Amer. austr. — Varietas a typo (*L. Sacchari* Speg. non Bred) omnibus partibus conspicue minoribus recedit.

75. *Leptosphæria kerguelensis* P. Henn., Deutsche Südpolar-Exped. 4130

Bd. VIII (1906) Extr. p. 11, tab. II, fig 7 a, b. — Peritheciis innato-suberumpentibus, ostiolatis, amphigenis, subglobosis, atromembranaceis, 150-180 μ . diam.; ascis clavatis, apice obtuse rotundatis, basi curvatis, octosporis, 50-70 \times 10-17; paraphysibus filiformibus, hyalinis, 1-1,5 μ . cr., flexuosis; sporidiis subdistichis v. subtristichis, fusoideis, utrinque rotundatis, 3-septatis, constrictiusculis, rectis vel curvulis, flavo-olivaceis, dein atro-fuscis, 15-20 \times 5-7.

Hab. in foliis Festuæ kerguelensis, Kerguelen-Station prope Zeltlager (E. WERTH).

76. *Leptosphæria culmifraga* (Fr.) Ces. et De Not. — Syll. II, p. 75 4131

- var. *alpestris* Rehm, Oest. bot. Ztschr. LVI (1906) p. 297. — (Nomen nudum).

Hab. in culmis Graminacearum, Zittertal sub Pfitscher-Joch, Austria.

77. *Leptosphæria larvalis* Saccardo, Fungi aliquot africani, Bol. Soc. 4132

Broteriana v. XXI (1904-1905) p. 5. — Peritheciis hinc inde laxegregariis, innato-erumpentibus, globulosis, 300-400 μ . diam., obsolete papillatis, nigris, glabris, membranaceo-coriaceis; contextu grosse parenchymatico, fuligineo-rufescenti; ascis e cylindraceo subclavatis, deorsum tenuatis, apice obtusis, 170-190 \times 25, filiformi-

paraphysatis, octosporis; sporidiis distichis cylindraceo-fusoideis, magnis, $80-85 \times 10-12$, utrinque obtuse tenuatis, sæpius curvulis, 10-11-septatis, non constrictis, fusco-olivaceis, grosse 11-12-nucleatis, nucleis pallidioribus, articulo altero supra medium paullulo crassiore.

Hab. in caulibus emortuis Equiseti pallidi in insula S. Thiago Cabo Verde, Africa (comm. A. MOLLER). — Ab affini *L. Equiseti* ascis sporidiisque multo majoribus imprimis differt.

78. **Leptosphæria Geasteris** Hollós, Ann. Mus. Nat. Hungar. V (1907) 4183 p. 279. — Peritheciis gregariis v. sparsis, erumpentibus, depresso-globosis, fuscis, apice pertusis, $170-210 \mu$. diam., contextu parenchymatico; ascis cylindraceis, breve stipitatis, 6-8-sporis, $60-70 \times 7-8$, filiformi-paraphysatis; sporidiis distichis, fusoideis, rectis vel leviter curvulis, 5-septatis, flavidulis, $18-22 \times 3-4$.

Hab. in stratu interno exoperidii Geasteris pseudolim-bati, prope Kecskemét Hungariæ.

79. **Leptosphæria fibrincola** v. Höhn. et Rehm, Ann. mycol. (1905) 4184 p. 228, Rehm. Ascom. Exicc. n. 1591. — Peritheciis dispersis, primitus innatis, dein emergentibus, globulosis, papillula minima vix conspicua, demum urceolato-collabentibus, ad basim hyphis crebris, simplicibus, septatis, fuscis, longis, $3-4 \mu$. lat., chartam longe percurrentibus, versus apicem setulis acutis, fuscis, brevibus sparsis obsessis $250-300 \mu$. diam.; contextu parenchymatico, fusco; ascis clavatis, apice rotundatis, 4-8-sporis, $70-80 \times 10-12$; sporidiis oblongis, rectis, transverse 3-septatis, ad septa interdum paullulum constrictis, cellula secunda latiore, hyalinis, dein dilute flavidulis, $20 \times 4-4.5$, distichis, paraphysibus filiformis, septatis, 3μ . cr.

Hab. ad chartam putridam, Augustæ Vindelicorum (BRITZEL-MAYR). — A *Leptosph. papyricola* et *Lept. (Pocosphæria) setulosa* satis distincta.

80. **Leptosphæria Typharum** (Desm.) Karst. — Syll. II, pag. 64 — 4185

***Leptosphæria papyrogena** Sacc. Ann. Mycol. VI (1908) p. 558. — A typo differt ascis longioribus, nempe $130-160 \times 15-20$; sporidiis paullo majoribus, $30 \times 11-12$, pariter olivaceo-melleis; peritheciis $200-250 \mu$. diam. charticolis.

Hab. in charta putrida, Rigny sur Arroux Galliæ, Majo 1908 (FLAGEOLET).

Subg. *Xenosphæria* Trev. Species lichenicolæ.

81. *Leptosphæria bæomycearia* (Linds.) Sacc. et Trott., *Microthelia* 4186
bæomycearia Linds. Lichenic. Microfungi, p. 541, t. XXIV, f. 6
 (1869). — Peritheciis minutissimis, dense gregariis, nigris, punctiformibus, globulosis, basi immersis; ascis (non descriptis); sporidiis oblongo-fusoides, utrinque obtusulis, majusculis, 3-septatis, ad septa constrictis, sæpe 4-guttulatis, brunneis, 24-26 \times 7-8.
Hab. in thallo *Bæomycetis* (Sphyriddii) rufi, Balthayock.
 — Verisimiliter eadem ac *Lept. sphyriddiana* (Lahm, 1874) Wint.
 — Syll. IX, p. 796.

POCOSPHÆRIA Sacc. Syll. II p. 32, XI p. 325, XIV p. 571, XVI p. 518.

1. *Pocosphæria Dendromeconis* Earle, Bull. of the New York Bot. 4187
 Gard. (1904) p. 293. — Peritheciis lineariter gregariis, infossis dein erumpentibus, primum pilis brevibus brunneis vestitis, demum subglabratis, nigris, duris, subcarbonaceis, non collabescentibus, 250-350 μ . cr., ostiolo inconspicuo; ascis cylindraceis 100-120 \times 9-10; paraphysibus copiosis, filiformibus; sporidiis monostichis, pallide fuscis v. flavidis, 3-septatis, ad septa constrictis, loculo medio leniter inflato, cellulis extremis conoideis acutisque, ceteris rotundatis, 18-20 \times 7-8.
Hab. in ramis emortuis *Dendromeconis* prope Stanford Univ. California Amer. bor. (LE ROY ABRAMS).
2. *Pocosphæria balcanica* v. Höhn., Fragm. z. Myk., in Sitzb. k. Ak. 4188
 d. Wissensch. Wien, Bd. CXVI, Abt. I (1907) p. 111. — Peritheciis immersis in areis nigricantibus, lineatis, 2-10 mm. long. stromatoideis gregarie insidentibus, membranaceo-firmis, nigris, globosis, apice in rostellum crassiusculum conoideo-attenuatis, 200-350 μ . lat., basi hyphis firmis sæpe fasciculatis, obscure brunneis, 8-12 μ . cr. apice setulis obtusis, brunneis, plerumque quadrilocularibus, 80 \times 6-7 præditis; paraphysibus numerosis, filiformibus; ascis crasse clavatis, sessilibus, supra rotundatis, crasse tunicatis, octosporis 105-140 \times 22-26; sporidiis 2-3-stichis, cylindraceo-clavatis, utrinque rotundato-obtusis et angustatis, semper sexlocularibus, pallide brunneis, apice utrinque cupula mucosa subhemisphærica vestitis, 40-44 \times 10-11.

Hab. in caulibus siccis *Veronicae gentianoideis*, Cej in

Romania (LOITLESBERGER). — *L. Morthierianæ* Sacc. verisimiliter affinis.

VENTURIELLA Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 379. (Etym. a *Venturia* cujus est analogum genus). — Perithecia superficialia subiculo destituta, hirsuta. Asci octospori paraphysati; sporidia fusioidea pluriseptata, olivascentia. — Est *Venturia* phaeophragmospora.

1. *Venturiella argentinensis* Speg. l. c., pag. 379 cum icon. — Peritheciis lenticulari-subhemisphaericis, 120-140 μ . diam., pilis minutis unicellularibus 40-60 \approx 4-6; ascis subcylindraceis breviter pedicellatis 70-75 \approx 8-9; sporidiis 5-septatis, 18-20 \approx 4-5, e' chlorino olivaceis. 4139

Hab. ad strata lignea ramorum excæsurum subputrescentium Pircuniae dioicæ in Silva Santa Catalina, prope Buenos Aires Rep. Argentina Amer. austr.

MASSARIA De Not. — Syll. II p. 2, IX p. 759, XI p. 319, XIV p. 561, XVI p. 510, XVII p. 732.

1. *Massaria bihyalina* v. Höhn. Fragm. Mykol. IX (1909), in Stzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, pag. 1503. — Peritheciis ligno v. cortice immersis, sparsis, sæpe seriatas, raro 2-3-approximato-confluentibus, depresso globosis, 800 μ . circ. diam., 470-520 μ . alt., rostello tunc verruciformi tunc usque ad 2 mm. longo, 350-400 μ . cr., apice ostiolato præditis; contextu nigro, coriaceo, opaco 40 μ . cr.; rostello basi sæpe breviter setuloso, primum viridi-pulveraceo demum nigro glabro; paraphysibus immersis, ascos superantibus, mucosis, guttulatis, 2-2,5 μ . cr.; ascis tenuiter tunicatis, clavatis, basi in pedicellum 36-44 \approx 3-6 abrupte angustatis, supra rotundatis 170-200 \approx 16-21, plerumque octosporis; sporidiis mono- v. distichis, ellipsoideo-fusioideis, plerumque 6-locularibus, crasse tunicatis, 32-44 \approx 11-12; loculis terminalibus hemisphaericis v. obtuse conoideis, hyalinis, tenuiter tunicatis, 3-4 μ . long., loculis 4 intermediis crasse tunicatis, brunneis, contentu oleoso præditis, ad septa non constrictis, loculis 2 internis 9-10 μ . ceteris 5 μ . longis. 4140

Hab. in ramis putrescentibus *Berberidis vulgaris* prope Ybbsitz in Austria inf. (P. LAMBERT). — A cæteris speciebus in *Berberide* vigentibus bene distincta.

2. *Massaria galeata* v. Höhn. Ann. Mycol. (1905) p. 403 cum icon. — Peritheciis globosis parum depresso et mutua pressione sub-

angulosis, ostiolo vix conspicuo, brunneis, contextu membranaceo-coriaceo, 400-500 μ . diam., solitariis v. usque ad 20 valsiformi-aggregatis, sub peridermio nidulantibus et fere semper tectis; ascis clavatis, 170-200 \times 33-40, plerumque octosporis; paraphysibus numerosis, multiguttulatis, filiformibus; sporidiis distichis v. tristichis, brunneis 6-raro 7-locularibus, crasse tunicatis, ad septa non constrictis, elongato-cylindraceutis, utrinque rotundatis, 42-58 \times 14-16, apice utrinque strato mucoso lato, campanuliformi tectis et tunc usque ad 76-86 μ . long.

Hab. ad ramulos Aceris Pseudoplatani prope Mödling et Puchberg Austriæ inferioris.

3. *Massaria Aceris* (Schulzer) Sacc. et Trav. Syll. XX p. 28., *Splanchnonema Aceris* Schulz. v. Mügg. in Verhandl. zool.-bot. Gesellsch. Wien (1865) p. 795, t. XVI, fig. 4 (sine diagnosi). — Peritheciis (non descriptis); sporidiis (ex icone) initio hyalinis oblongis, didymis, 4-guttatis, maturis cylindraceutis, utrinque obtuse rotundatis, 5-septatis, ad septa subconstrictis, septulo 1 longitudinali auctis, fuliginis, strato mucoso tenui (ut videtur) cinctis.

Hab. in ramis Aceris campestris in Hungaria. — Ignotis peritheciis et dimensionibus fructificationis species omnino incerta. — An *Pleomassaria*?

4. *Massaria scoparia* Rehm, Ann. Mycol. IV (1906) p. 402. — Peritheciis dispersis, sub peridermio nidulantibus, papillula minima prominente, globulosis, atris, parenchymatice contextis, glabris, 350 μ . diam.; ascis clavatis, crasse tunicatis, 90-110 \times 18-25, octosporis; sporidiis oblongis v. oblongo-clavatis, utrinque rotundatis, 3-septatis, medio, minus ad cetera septa, subconstrictis, fuscis, demum episporio scabriusculo, strato mucoso lato obductis, 21-25 \times 8-10, distichis; paraphysibus filiformibus.

Hab. in caulibus emortuis Sarothamni scoparii prope Rüdelsbrunn Germaniæ (Rehm). — A *M. stipitata* Feltg. diversa.

5. *Massaria theicola* Petch, Ann. Roy. Bot. Gard. Peradenyia III, Pt. I (1906) p. 3. — Peritheciis gregariis, in cortice omnino immersis, nigris, 0,25-0,3 mm. diam.; ascis anguste cylindraceutis, 120-160 \times 20, octosporis; paraphysibus paucis, septatis; sporidiis oblique monostichis, hyalinis, continuis, deinde biseptatis, olivaceis, anguste ovatis, loculo medio sæpe nigriore, in guttam expulsis, 17-22 \times 6-7.

Hab. in ramulis nigriticatis Theæ viridis, Ceylon.

6. *Massaria Xylostei* Hazsl. Sphaer. Hung. pag. 174, t. XII, f. 49

(1893). — Similis *M. Piri*; sporidiis (ex icone) breviter fusoides, brunneis, utrinque acutatis, strato mucoso hyalino crasso obvolutis, 4-nucleatis, nucleis extimis triangularibus, mediis transverse ellipsoideis, dein pseudo-4-ocularibus, oculis mediis angustioribus.

Hab. in ramis *Lonicerae Xylostei* in Hungaria.

7. *Massaria argentinensis* Speg. An. Mus. Nac. Buenos Aires t. XIX 4146 (1909) p. 380. — Peritheciis primo cortice tectis dein cum cortice secedentibus, lenticulari-subhemisphaericis, 250-350 μ . diam., minute ostiolato-pertusis; ascis cylindraceis brevissime pedicellatis, paraphysatis, 180-200 \times 18-22, octosporis; sporidiis 3-septatis 35-40 \times 14-18 pulchre fuliginis, primo mucoso-vestitis.

Hab. ad ramos putrescentes *Oleæ europææ*, Chacarita, Lucheæ grandifloræ, Santa Catalina, Macluræ aurantiacæ, Marmol, Argentina Amer. austr.

8. *Massaria Fraxini* Hazsl. Sphær. Hung. (1893) pag. 174, t. XII, 4147 f. 49 e. — Peritheciis (non descriptis); sporidiis elongato-fusoides, rectis, 5-septatis, 6-guttatis, non constrictis, utrinque acutis, brunneis, strato mucoso hyalino crasso obvolutis.

Hab. in cortice *Fraxini* in Hungaria.

9. *Massaria texana* Rehm, Ann. Mycol. V (1907) p. 517. — Peritheciis dispersis, cortice innatis, globosis, 0,3-0,4 mm. diam., e cortice ibi denigrato protuberantibus, poro minutissimo pertusis; ascis cylindraceis, apice rotundatis, 100 \times 10, octosporis; sporidiis ellipsoideis, utrinque rotundatis, 3-septatis, haud constrictis, subfuscis, 12-14 \times 7-8, strato tenui mucoso obductis, 1-stichis, paraphysibus filiformibus, guttulatis, 1,5 μ . cr.

Hab. in cortice *Quercus* (Spanish), Texas Amer. bor. (LONG, ATKINSON). — *Massarice stipitatae* affinis.

10. *Massaria platanioides* Rehm, Ann. Mycol. IV (1906) p. 336. — 4149 Peritheciis gregariis, cortice interiori haud mutato, subdealbato innatis, globulosis, 0,5-0,7 mm. diam., papillula semiglobosa, atra, corticem dealbatum perforantibus; ascis cylindraceis, c. 150 \times 15, octosporis; sporidiis oblongis utrinque rotundatis, 3-septatis, cellulis massariæformiter ellipsoideis, interdum cellula una media iterum septata 5-cellularibus, fuscis, primitus cellulis apicalibus subhyalinis, non perpendiculariter divis, 22-25 \times 10-12, ad septa haud constrictis, strato tenui mucoso obvolutis, 1-stichis; paraphysibus filiformibus, teneris, septatis, guttulatis, 3 μ . cr.

Hab. in cortice trunci dejecti spec. indet., Lyndonville N. Y.

Amer. bor. — Affinis *Massarie Platani*, a qua sporidiis et peritheciis amplioribus recedit.

CLYPEOSPHERIA Fuck. — Syll. II p. 90, IX p. 798, XI p. 326, XIV p. 572, XVI p. 518, XVII p. 732.

1. *Clypeosphaeria myrticola* Spegazz., An. Mus. Nac. Buenos Aires 4150 t. XIX (1909) p. 381. — Peritheciis adnatis epidermide velatis, laxe gregariis, atris, nitidulis, e lenticulari subhemisphaericis 180-200 μ . diam.; ascis cylindraceutis brevissime pedicellatis, paraphysatis, 110-120 \times 22-26, octosporis; sporidiis distichis ellipsoideis 3-septatis, ferrugineo-fuligineis, 30-32 \times 15-16.

Hab. ad ramulos vivos *Eugenie* cujusdam in silvis prope Formosa Rep. Argentine Amer. austr. — Species notis nonnullis licheninis donata sed thallus adhuc omnino nullus visus.

2. *Clypeosphaeria chilensis* Speg., Fungi Chilenses (1910) p. 81. — 4151 Peritheciis cortice innatis, epidermide circa ostiolum minute nigricata tectis, parvis lenticulari-subglobosis, subcarbonaceis, 180-350 μ . diam.; ascis e cylindraceuto subclavulatis brevissime pedicellatis, dense paraphysatis, 120-150 \times 14-30; sporidiis mono-v. distichis, ellipsoideis, utrinque subacutiusculis, pulchre fuligineis, mediocribus, 3-septatis, non v. vix constrictulis, oculis nucleis lenticularibus v. semilunaribus præditis, 30-35 \times 10-14.

Hab. in ramis emortuis *Eugenie* cujusdam in silvis prope Serro de Caracol de Concepcion Chile Amer. austr.

3. *Clypeosphaeria? theobromicola* Spegazz., Micromicetos de los Ca. 4152 caoyeros, Rev. Facult. Agronom. y Veter. La Plata t. II (1906) nn. 4-6, p. 305, fig. B. — Peritheciis laxiuscule inordinateque gregariis, cortice leniter sordideque dealbato v. pallescente innato-superficialibus, plus minusve nudis v. sæpe fere totis tenuiter velatis, superne modice hemisphaerico-prominulis, mediocribus (0,50-1 mm. diam., 0,40-0,50 mm. altis), inferne applanatis, carbonaceis duris, rigidis, intus nucleo mucoso albido farctis; ascis cylindraceutis, antice obtuse rotundatis postice cuneatis breviter crasseque pedicellatis 80-100 \times 10-15, paraphysibus filiformibus densis subcoalescentibus obvallatis, 8-sporis; sporidiis sæpius oblique monostichis, ellipsoideis v. leniter navicularibus, utrinque obtusiusculis 18 \times 8, primo 6-blastis, serius 5-septatis, ad septa leniter constrictis, hyalinis.

Hab. in cortice *Theobromæ Cacao*, Bahia de Todos los

Santos Brasiliæ (HEMPEL). — Fungus lichenoides, *Pyrenulæ* proximus.

4. *Clypeosphæria Asparagi* (Fuck.) Wint. — Syll. IX, pag. 798 — 4153
var. *montenegrina* Bubák, Bull. Herb. Boiss. 2 sér. VI (1906)
p. 403. — A typo differt sporidiis minoribus 15,5-17,5 \times 4-5, re-
ctis, raro curvulis.

Hab. in caulibus emortuis *Asparagi verticillati* prope
Rijeka Montenegro.

5. *Clypeosphæria ? valparadisiensis* Spegazz. Fungi Chilenses (1910) 4154
pag. 81 cum icon. — Peritheciis gregariis sæpius longitudinaliter
seriatis, epidermide stromatice nigrificata tectis, lenticularibus mi-
nutis coriacellis 150-200 μ . diam.; ascis subclavulatis breviter pe-
dicellatis dense paraphysatis, 110-130 \times 20; sporidiis distichis sub-
fusoides non v. vix inæquilateralibus mediocribus 3-septato-con-
strictulis olivaceo-fuliginis, tunica mucosa tenui obvolutis, 34-
42 \times 9-12.

Hab. in culmis vetustis putrescentibus *Chusqueæ Cumin-*
gii Cerro Alegre de Valparaiso Chile Amer. austr.

6. *Clypeosphæria minor* Starb., Ascom. Schw. Chaco-Cordill. Exp., 4155
Arkiv f. Bot. Bd. V (1905) pag. 25. — Peritheciis gregariis im-
mersis lenticulariter sphærioides vertice applanato-convexulo, cum
cortice atrato concrecente, perpauillum illum elevatibus, centro
lenissime papillulatis demum poro minutissimo perforatis, atratis,
contextu carbonaceo, membranaceo, c. 200-250 μ . diam.; ascis
octosporis, late cylindræis, sursum rotundatis, sessilibus, 100-125
 \times 24-25; sporidiis distichis, ellipsoideis vel ellipsoideo-oblongatis,
primo triseptatis, loculis uniguttulatis, deinde sæpe quinque-septa-
tis, ad septa constrictulis, vetustis obsolete septatis, vix muco te-
nuissimo obvolutis, 23-32 \times 10-12; paraphysibus copiosissimis fili-
formibus, ramulosis, hyalinis.

Hab. in ramulis aridis pr. Laguna de la Brea, prov. Jujuy,
Argentina. — A *C. massariospora* Starb. peritheciis minoribus,
sporidiis majoribus plane differt.

7. *Clypeosphæria splendens* Rick, Broteria V (1906) p. 48. — Pe- 4156
ritheciis 0,5 mm. latis, clypeo 1-2 mm., nigro, orbiculari, splen-
dente, ostiolo brevi; ascis 150 \times 13-15, tenuibus, apice incrassatis,
sporidiis cylindræis, 26-32 \times 7, vix curvulis, constanter triseptatis,
initio hyalinis, dein chlorinis; paraphysibus hyalinis, dilutis, 2 μ .
latis, septatis, non ramosis.

Hab. in epidermide Bromeliaceæ cujusdam epiphytæ, Rio Grande do Sul Brasiliæ.

MELANOMMA Nits. et Fuck. — Syll. II p. 98, IX p. 801, XI p. 327, XIV p. 573, XVI p. 522, XVII p. 733.

1. **Melanomma suldensis** Rehm, Ann. Mycol. V (1907) pag. 539. — 4157
Peritheciis dispersis, sessilibus, globosis, minutissime papillulatis, atris, glabris, ad basim hyphis nonnullis fuscis obsessis, carbonaceis, 400 μ . diam.; ascis cylindraceis, 90-100 \times 12, tetrasporis; sporidiis ellipsoideis, 3-septatis, cellula secunda latiore, utrinque subattenuatis, ad septa subconstrictis, rectis, quaque cellula guttam oleosam magnam includente, hyalinis, demum subfuscis, 21-25 \times 6-8, monostichis; paraphysibus filiformibus septatis, hyalinis, 4 μ . crassis.

Hab. ad caulem? Cerastii emortui inter moles glaciales supra Suldën, Ortler Tirolie (Dr. REHM). — Proximæ species: *M. rubinum* Karst. sporidiis utrinque obtusis, curvulis, peritheciis erumpentibus differt; *M. Dryadis* Johans. peritheciis erumpentibus crustaceo-congestis, sporidiis haud guttatis diversa.

2. **Melanomma glaciale** Rehm, Oesterr. bot. Zeitschr. LVI (1906) 4158 pag. 294. — (Nomen nudum).

Hab. in caulibus Cerastii latifolii Alpeiner-Gletscher Stubai, Austria.

3. **Melanomma Mate** Spegazz., An. Mus. Nac. Buenos Aires t. XVII 4159 (1908) p. 126. — Peritheciis hemisphæricis 75-100 μ . diam., plus minusve laxè gregariis, nigris, subcarbonaceis, basi tantum matrici insculptis, matrice sordide infusata insidentibus; ascis clavulatis breviter pedicellatis 60 \times 8-10, paraphysatis; sporidiis ellipsoideo-subfusoides, 3-septatis ad septa leniter constrictulis, loculis grosse 1-guttulatis, 12-15 \times 3-4, fuligineis.

Hab. in superficie interna truncorum cariosorum Illeis paraguariensis in silva circa S. Pedro, Argentinae Amer. austr.

4. **Melanomma Trevoæ** Speg., Fungi Chilenses (1910) p. 76. — Peri- 4160
theeciis in ligno denudato, laxè vel dense gregariis, insidentibus, globoso-depressis, minutis, glabris, atro-carbonaceis, vix papillato-ostiolatis 150-200 μ . diam.; ascis cylindraceis breviter pedicellatis densiuscule paraphysatis, 100 \times 6-8; sporidiis parvis elliptico-subclavulatis pallide fuligineis, 3-septatis, leniter constrictulis, loculo mediano supero sæpius nonnihil crassiore, 14-15 \times 4-6.

Hab. in ramis emortuis *Trevoæ trinervis* in collibus San Bernardo prope Santjago, Chile, Amer. austr.

5. *Melanomma sordidissimum* Spegazz., An. Mus. Nac. Buenos Aires 4161 t. XIX (1909) p. 384. — Peritheciis ligno latissime nigrificato insidentibus, dense constipatis sæpe pseudostromate heterogeneo coniunctis, carbonaceis, 90-100 μ . diam.; ascis e cylindraceo subfusoides brevissimeque pedicellatis 50 \times 10, octosporis, paraphysatis; sporidiis cylindraceo-ellipsoideis primo didymis serius 3-septato-constrictis, rectis vel leniter curvulis, 10-12 \times 5-5,5 obscure fuligineis.

Hab. ad ramos decorticatos emortuos *Eriobotryæ japonicæ* in horto Santa Catalina prope Buenos Aires, Argentina Amer. austr.

6. *Melanomma Ceratoniae* Roll. in Bull. Soc. Mycol. Fr. (1905) p. 24, 4162 tab. I, f. 2. — Peritheciis gregariis, carbonaceis, globosis, papillatis, 0,5 mm. latis e ligno erumpentibus; ascis oblongo-clavatis, pedicellatis, 130-140 \times 20-25, paraphysibus exiguis obvallatis, octosporis; sporidiis distichis v. subtristichis, tereti-oblongis, utrinque leviter rotundato-attenuatis, curvulis raro rectis, crasse 8-septatis, ad septa præcipue medium constrictis, guttulatis, griseo-virentibus, dein brunneis, 30-32 \times 10.

Hab. in ligno vetusto *Ceratoniae Siliquæ*, Can Carió in insulis Balearibus. — *Mel. Passerinii* et *M. nigrisepto* affine.

7. *Melanomma andinum* Speg., An. Mus. Nac. Buenos Aires t. XIX 4163 (1909) p. 383. — Maculis nullis; peritheciis primo tectis, dein denudatis sparsis v. pauci-aggregatis, carbonaceis, lenticulari-depressis, 150 μ . diam., vix papillulato-ostiolatis, subpruinulosis; ascis clavatis brevissime stipitatis, 100 \times 20, octosporis, pseudoparaphysatis; sporidiis e cylindraceo ellipsoideis, 3-septatis, 27-29 \times 10, fusco-fumosis.

Hab. ad ramos dejectos putrescentes *Bulnesiæ Retamo* in andinis Upsallata, prope Mendoza, Argentina Amer. austr.

8. *Melanomma Sambuci* Earle, Bull. of the New York Bot. Gard. 4164 (1904) p. 291. — Peritheciis gregariis, sæpe confertis, primum infossis sed mox erumpenti-superficialibus, nigris, globosis, rugosis, non collabescentibus, circ. 300-350 μ . diam., ostiolo obscure papillato; ascis clavato-cylindraceis 90-110 \times 9-10; paraphysibus copiosis, filiformibus; sporidiis monostichis, fuscis, anguste ellipsoideis vel anguste ovoideis, 3-septatis, leniter constrictis, loculo medio sæpe leniter inflato, 20-25 \times 7-8.

Hab. in ramis emortuis Sambuci, Snow Valley Peak, Ormsby Co. Nevada Amer. bor. (C. F. BAKER).

9. *Melanomma? præandinum* Spegazz., An. Mus. Nac. Buenos Aires 4165 t. XIX (1909) p. 384. — Peritheciis plus minusve seriatis confertis superficialibus ligno denudato rimulosoque insidentibus, atris, glabris, subglobosis, minutis; ascis subcylindraceis, breviter crassiusculeque pedicellatis $120-150 \times 14-15$, octosporis, paraphysatis; sporidiis elongato-subfusoides 5-(rarius 7-) septatis, leptosphærioides, $40-50 \times 5-6$, ad septa non v. vix constrictulis, loculo medio superiore incrassatulo primo chlorinis, serius pallide olivaceis.

Hab. ad caules aridos Salviæ Gilliesi in præandinis Chachenta, prope Mendoza, Argentina Amer. austr.

10. *Melanomma cacheutense* Spegazz., An. Mus. Nac. Buenos Aires 4166 t. XIX (1909) p. 383. — Peritheciis superficialibus confertis subglobosis, $150-180 \mu$. diam., eximie minuteque papillato-ostiolatis, atris, glabris; ascis subclavulatis basi pedicello brevi gracili præditis, $100-120 \times 16-18$, paraphysatis, octosporis; sporidiis e cylindraceo subclavulatis, 5-septatis ad septa omnia constrictis, olivaceis, $26 \times 8-10$, rectis v. leviter curvulis, loculis centralibus sæpius minute 1-guttulatis.

Hab. ad ramos emortuos decorticatos Baccharidis glutinosæ, in alveo fluminis Mendoza prope Cacheuta Argentina Amer. austr.

11. *Melanomma chilense* Spegazz., Fungi Chilenses (1910) p. 75 cum 4167 icon. — Peritheciis superficialibus, hinc inde constipatis, globosis, subparvis, atris, glabris, opacis carbonaceis, vix papillato-ostiolatis, $350-500 \mu$. diam.; ascis subcylindraceis primo octosporis, serius sæpius tetrasporis, breviter pedicellatis dense paraphysatis, $140-150 \times 20$; sporidiis distichis fusoides utrinque acute 5-septatis, loculo mediano supero doliiformi maximo, fuligineis, majusculis, $20 \times 12-15$.

Hab. in ramis emortuis Proustie pungentis prope Batuco Chile Amer. austr.

12. *Melanomma fuscicululum* Sacc. — Syll. II, p. 99. — f. *populinum* 4168 Rehm, Ascom. exsicc. fasc. 37, n. 1665, Ann. Mycol. IV (1906) p. 408. — A typo differt peritheciis plerumque omnino liberis, rarius basi leviter adnatis.

Hab. in cortice Populi pyramidalis emortuo prope Neufriedenheim Bavaria (RHEM).

13. *Melanomma Juniperi* Ellis et Everh. ap. Fairm. The Pyren. of 4169

Orleans County in Proc. Rochest. Acad. (1905) p. 190. — Peritheciis superficialibus basi leniter in ligno insidentibus, globosis, nigris, latis, sparsis v. quandoque lenissime confertis, ostiolo parvo prominulo submastoideo præditis; ascis cylindraceis, angustis; sporidiis fusoideis, brunneis, 3-5-septatis, duobus cellulis mediis inflatis, terminalibus angustioribus, $40 \approx 10-12$.

Hab. in ramis languidis Juniperi virginianæ, Lyndonville N. Y. Amer. bor.

14. **Melanomma juniperincola** Rehm, Oesterr. botan. Zeitschr. LVI 4170 (1906) p. 293. — (Nomen nudum).

Hab. in ramulis Juniperi nanæ, Alpeiner-Alpe Stubai Austria.

15. **Melanomma anceps** v. Höhn. in Stzb. k. Ak. d. Wissensch. Wien 4171 CXVIII, Abt. I (1909) p. 330. — Peritheciis superficialibus, sparsis, globosis, supra parum depressis, verrucoso-rugulosis, fragiliter subcarbonaceis, 600-700 μ . diam.; parietibus 80-180 μ . cr. nigro-violaceis, parenchymaticis; paraphysibus numerosis late filiformibus, mucosis; ascis tenuiter tunicatis, clavatis, utrinque sensim angustatis, octosporis, $110 \approx 13$; sporidiis distichis, elongatis, utrinque angustato-obtusis, rectis v. curvulis, tenuiter tunicatis, $30-36 \approx 6-7,5$ diu hyalinis et bilocularibus, demum pallide violaceis et quadrilocularibus, ad septa non constrictis, loculis mediis angustioribus.

Hab. in caulibus putrescentibus Monocotyledoneæ cujusdam, Buitenzorg in ins. Java.

16. **Melanomma epiphytica** Raciborski, Bull. Ac. Sc. Cracovie (1909) 4172 p. 387. — Hypothallo 1-3 cm. lato, crasso, nigro-carbonaceo, arcte adnato, pilis simplicibus septatis brevibus nigris horizontaliter patentibus dense tecto; peritheciis in centro plagarum plerumque evolutis, hemisphæricis, parietibus crassis validis et superficie inæquali præditis, nigro-carbonaceis, fragilibus, apice depresso ostiolatis, intus mucosis; paraphysibus filiformibus numerosissimis; ascis elongato-cylindraceis $320-380 \approx 25-29$, crasse tunicatis, octosporis; sporidiis monostichis, $60-80 \approx 19-22$, levibus, brunneis, medio constrictulis, elongato-ovoideis, quadrilocularibus, raro 2-3-lo-
cularibus.

Hab. in culmis ramulisque vivis Bambusarum frequens prope Buitenzorg in ins. Java.

17. **Melanomma glumarum** I. Miyake, Pilze Reispfl. Japan in Journ. 4173 Colleg. Agricult. Tokyo, II (1910) pag. 242, t. XIII, f. 1-3. — Peritheciis in pagina super. glumarum sparsis, globosis v. ellip-

soideis, nigris, ostiolatis, 150 μ . circ. diam.; ascis cylindræis breviter pedicellatis, plerumque curvulis, 70-90 \approx 10, octosporis; sporidiis distichis, fusoides, plerumque incurvatis, obscuris, 24-30 \approx 4-5, triseptatis, 1-2 guttulatis; paraphysibus non visis.

Hab. in glumis *Oryzæ sativæ*, Soochou Sinarum (I. MRYAKE).

- 18 *Melanomma Xylariæ* v. Höhnelt, *Ergeb. Bot. Exp. Südbres.* 1901, 4174
 Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. p. 24.
 — Peritheciis superficialibus in greges rotundatos 0,5-1,5 mm. latos arcte confertis, globosis v. obconoideis, sæpe subtympaniformibus, supra nitidulis, plerumque depressis et umbilicatis, basi rugulosis, opacis, coriace-carbonaceis. demum sæpe collabescentibus 350-450 μ . diam.; ascis octosporis, clavatis, breviter pedicellatis, 100-120 \approx 12-14; paraphysibus numerosis, filiformibus, ascos superantibus, mucosis; sporidiis plerumque distichis, quadrilocularibus, fusoides, utrinque angustatis, obtuse rotundatis, loculo medio brunneo, loculis terminalibus subhyalinis, septo medio plerumque subangustatis, 28-40 \approx 5-6.

Hab. parasitice in *Xylaria polymorpha*, Alto da Serra Sao Paulo Brasiliæ. — *Mel. anglico* (PLOWR) affinis species.

TREMATOSPHERIA Fuck. — Syll. II p. 115, IX p. 811, XI p. 329, XIV p. 575, XVI p. 524, XVII p. 734.

1. *Trematosphaeria euganea* Gaia, *Flor. micol. prov. Padova*, p. 21 4175
 (sunto litogr.). — Peritheciis solitariis, rarius 2-3 proximatis, nigris, carbonaceis, sphaericis, tenaciter putamini infixis et basi vix subimmersis, 700-900 μ . diam., ostiolo mediocriter papillato, cylindræo, crasso, ad apicem conice sæpe obtruncato atque pertuso; ascis clavatis, breviter stipitatis, 190-210 μ . longis; paraphysibus filiformibus guttulatis; sporidiis irregulariter distichis, curvulis, fulvo-fuscis, 7-septatis, raro 6-5-septatis, ad apicem aliquantulum attenuatis et pallidioribus, 48-52 \approx 11-12.

Hab. in putamine *Persicæ vulgaris*, Cattajo prope Battaglia, in Euganeis Ital. boreal. — Accedit ad *Trematosphaeriam callispermam*, a qua differt præcipue longitudine ascorum et sporidiorum, et peritheciis vix subimmersis.

2. *Trematosphaeria Virginis* Rehm, *Ann. Mycol.* V (1907) p. 540. — 4176
 Peritheciis in ligno decorticato late denigrato subgregariis, globoso-conoideis, lata basi sessilibus, plerumque papillulatis, poro minutissimo pertusis, atris, glabris, carbonaceis, 0,7-1 mm. diam.; ascis

cylindræis, apice rotundatis, $150 \times 15-17$, octosporis; sporidiis ellipsoideis, subobtusis, rectis, hyalinis, demum dilute flavidulis, 3-septatis (an demum 5-septatis?) $21-25 \times 8-9$, monostichis; paraphysibus filiformibus, hyalinis.

Hab. ad caules siccos Dryadis octopetalæ, juxta glaciem Eiger Virginis Helvetiæ (Dr. REHM). — Peritheciis amplis facile dignoscenda; a *T. Henriquesiano* sporidiis minoribus recedit.

3. *Trematosphæria hypoxylodes* Rehm, Ann. Mycol. V (1907) p. 540. 4177
Peritheciis gregariis interdum 2-3 arcte consociatis, globulosis, sessilibus, parte dimidia inferiore cortici immersa, superiore hemisphærica in papillulam brevissimam, poro conspicuo pertusam elongata, nigris, nitentibus, glabris, 1-1,5 mm. diam., carbonaceis; ascis cylindræo-clavatis, apice rotundatis, $150-180 \times 12-15$, octosporis; sporidiis fusiformibus, haud acutis, rectis, 7-septatis, ad septa, imprimis medium, subconstrictis, cellula quarta longe cæteris majore, cellula tertia et quarta guttam oleosam magnam includente, subfuscis, $30-33 \times 8-10$, distichis; paraphysibus filiformibus.

Hab. ad corticem Tiliæ in Lusatia sup. (FEURICH).

4. *Trematosphæria Palaquii* Ricker, A List Philipp. Fungi, in Philipp. 4178
Journ. of Science, I Suppl., (IV 1906) p. 281. — Peritheciis gregariis v. sparsis, leniter immersis, subcarbonaceis, nigris, ovato-globosis, 1-2 mm. diam., ostiolo plerumque obtuse conoideo, mox deciduo; paraphysibus filiformibus, numerosis, asco longioribus; ascis clavatis v. cylindræis, 5-sporis, $132-141 \times 14-15$; sporidiis monostichis, ovato-oblongis primum hyalinis dein brunnescentibus, 3-septatis, non constrictis, $17-20 \times 8-12$.

Hab. in cortice Palaquii latifolii, Luzon Prov. Parlae in ins. Philippin. (MERRILL).

5. *Trematosphæria Erythræ* P. Henn., Hedwigia XLVII (1908) 4179
p. 268 (nec. *T. Erythræ* P. Henn. l. c. pro errore). — Peritheciis sparsis v. subgregariis, innato-superficialibus, atro-subcarbonaceis, subhemisphæricis, ostiolatis, centro depressis, c. 300 μ . diam.; ascis clavatis, obtusis, 8-sporis, $60-70 \times 8-10$, paraphysibus filiformibus c. 2 μ . crassis; sporidiis subdistichis oblongo-fusoides utrinque subacutis, 6-7-septatis, fusco-brunneis, $26-32 \times 3\frac{1}{2}-4$.

Hab. in pedunculis Erythræ ramosissimæ, Rio de Janeiro, Serra do Itatiaia, Brasilia.

6. *Trematosphæria socialis* Kirschst., Verh. Bot. Ver. Brandenb. 4180
XLVIII (1906) p. 53. — Peritheciis gregariis in ligno nigrefacto

immersis, ostiolo acuto brevi prominentibus, compactis, nigris, majusculis; ascis elongato-clavatis in pedicellum elongatis, 150-180 \times 12-16, octosporis; sporidiis recte polystichis, obscure brunneis, 4-6-locularibus, parum constrictis, cellula terminali pallidiori, anguste subfusoides, 34-45 \times 6-8; paraphysibus numerosis, filiformibus, hyalinis.

Hab. in ligno Alni putrescente, Semlin prope Rathenow, Germaniæ.

7. **Trematosphaeria tripartita** Kirschst., Verh. Bot. Ver. Brandenb. 4181 XLVIII (1906) p. 53. — Peritheciis sparse gregariis in ligno nidulantibus, ostiolo brevi crasso prominentibus, minutis, tenui-membranceis; excipulo brunneo, parenchymatico; ascis clavatis v. subcylindræis, supra rotundatis, crasse tunicatis, sessilibus vel brevissime crasseque pedicellatis, octosporis, 60-70 \times 10-12; sporidiis oblique v. recte distichis, cylindræis, utrinque rotundatis, rectis, trilocularibus, primum flavis dein pulchre castaneo-brunneis, ad septa constrictulis, 14-18 \times 4-6; paraphysibus crassiusculis, filiformibus, conglutinatiss.

Hab. in ligno salicino decorticato, Gross-Behnitzer See Germania.

8. **Trematosphaeria pallidisporea** Kirschst., Verh. Bot. Ver. Brandenb. 4182 XLVIII (1906) p. 53. — Peritheciis sparse gregariis, immersis, dein plus minusve prominentibus, parvis, coriaceis, breviter crasseque papillatis, nigris, lignum rubro colorantibus; ascis anguste clavatis, supra rotundatis, breviter pedicellatis, octosporis, 120-150 \times 15-18; sporidiis irregulariter pluriseriatis, hyalinis, maturis flavidis, fusoides, utrinque rotundatis, rectis v. curvulis, 10-locularibus, ad septa fortiter constrictis, loculis uni-v. pluriguttulatis, 30-40 \times 6-7; paraphysibus numerosis, filiformibus, septatis, hyalinis.

Hab. in ramis salicinis decorticatis putrescentibus, prope Rathenow Germaniæ.

9. **Trematosphaeria bambusicola** Rick, Broteria V (1906) p. 47. — 4183 — Peritheciis primitus immersis, cute nigrefacta, dein ad dimidiam partem prorumpentibus, scissura longitudinali $\frac{3}{4}$ mm. diam., atris, ostiolo brevi, obtuso; ascis 100-130 \times 5-6, pedicellatis, sporidiis fusiformibus 3-4-locularibus, subhyalinis, in septis valde constrictis, 20 \times 4-5, subcurvulis; paraphysibus filiformibus, ascum longe superantibus.

Hab. in culmis siccis Bambusæ, Rio Grande do Sul Brasiliæ.

10. **Trematosphaeria ephemera** Rehm apud Hazsl. Sphær. Hung. 4184

(1893) p. 69, t. IV f. 15. — Peritheciis superficialibus, gregariis hemisphærico-conoideis, ostiolo longiusculo, nigris; ascis clavatis apice rotundatis, brevissime stipitatis octosporis; sporidiis irregulariter distichis, 3-septatis, non constrictis oblongo-fusoideis, utrinque acutiusculis, hyalinis, $26-28 \times 7$, rectis.

Hab. in culmis emortuis Zeæ Maydis in Hungaria (LOJKA).
— Vix hujus generis.

TREMATOSPHERELLA Kirschst., Verh. Bot. Ver. Brandenb. XLVIII (1906) pag. 54. (Etym. a *Trematosphaeria*, cujus est analoga). — Perithecia innato-erumpentia, parva, nigra, coriaceo-membranacea, breviter ostiolata. Asci late clavati, fere ovoidei, octospori, apophysati. Sporidia fusoidea, plurilocularia, colorata. — A *Trematosphaeria*, cui affinis differt peritheciis submembranaceis, paraphysibus nullis.

1. *Trematosphaerella fuscispora* Kirschst. l. c. p. 54, cum icon. — 4185
Peritheciis gregariis ligno innatis, nigris, coriacellis, basi hyphis brunneis paucis ornatis, subglobosis, $200-300 \mu$. diam., ostiolo prominentibus v. superficialibus; ascis late clavatis, vix pedicellatis, supra rotundatis, octosporis, $40-56 \times 12-16$; sporidiis irregulariter fusoideis, utrinque rotundatis, irregulariter dispositis, griseo-brunneis, quadrilocularibus, loculo secundo plerumque crassiori, $14-20 \times 4-5$.

Hab. in ligno pineo putri in silvis prope Rathenow Brandenb. Germaniæ.

TRICHOHLERIA Sacc., Ann. Mycol. VI (1908) p. 559. (Etym. *thrix trichos* pilus et *Ohleria*, h. e. *Ohleria* pilosa). — Perithecia superficialia, globoso-conoidea; membranaceo-molliuscula, pilis v. setis vestita, nigricantia, ostiolo prædita. Asci elongati, paraphysati, octospori. Sporidia oblonga, v. fusoidea, 3-septata, colorata, mox medio secedentia et semisporas 16 biloculares formantia. — Ab *Ohleria* recedit tantum villo et mollitie peritheciorum.

1. *Trichohleria quadrigellensis* Flag. et Sacc. in Sacc. Ann. Myc. VI 4186 (1908) pag. 559, tab. XXIV, f. 2. — Peritheciis laxè gregariis, globosis v. globoso-conoideis obtuse papillatis, 300μ . diam., nigris, ubique pilosis; contextu celluloso, dilute olivaceo-fuligineo, ex cellulis globoso-angulosis $10-12 \mu$. diam. formato, molliusculo; pilis perithecii densiusculis, filiformibus, tortuosis, fuligineis septatis, $80-100 \times 3-4$; ascis tereti-clavatis, filiformi-paraphysatis, apice ob-

tusulis, sensim longe tenuato-stipitatis, 70-80 \times 5,5-6,5, octosporis; sporidiis fusoidis, distichis, rectiusculis, 20 \times 3, mox in articulos (16) conoideos biloculares dilabentibus, olivaceo-fuscis.

Hab. in ramis fagineis decorticatis putrescentibus, Rigny sur Arroux, Gallia (FLAGEOLET). — Ob contextum molliusculum ad Hypocreaceas vergit. «Quadrigellensis» dicimus ex Quadrigellis h. e. Charolles, territorium in quo reperta est species.

CARYOSPORA De Not. — Syll. II p. 122, IX p. 815, XI p. 329.

1. *Caryospora cariosa* Fairman, The Pyren. of Orleans County in 4187
Proceed. Rochest. Acad. (1905) p. 190 cum fig. 1-6. — Peritheciis majusculis, conicis, nigris, superficialibus v. basi ligno leniter immersis, sparsis vel gregariis; ostioliis parvis; ascis 4-8-sporis, oblongo-cylindraceis, p. sp. 150 \times 20, paraphysibus filiformibus numerosis obsitis; sporidiis recte monostichis, primum hyalinis dein brunneis demumque fere opacis, uniseptatis, raro versus apicem etiam septatis ideoque 3-septatis, granuloso-guttulatis, septo medio constrictis, e fusoides biconoideis, apice subobtusis, 36-43 \times 13-17.

Hab. in ligno fagineo carioso, Lyndonville N. Y. Amer. bor.

CHÆTOSPHERIA Tul. — Syll. II p. 92, IX p. 799, XI p. 326, XIV p. 572, XVI p. 521, XVII p. 736.

1. *Chaetosphaeria ludens* Morg., Journ. of Myc. XI (1905) p. 105. — 4188
Peritheciis globosis simpliciter pertusis c. 0,4-0,5 mm. diam., setulis longis, 150-200 μ ., pallide brunneis vestitis, gregariis, crusta tenui brunnea v. nigra insidentibus, subfibrillosis; ascis tetrasporis paraphysatis, longe pedicellatis, 130-150 \times 8-9; sporidiis ellipsoideo-oblongis, leniter inaequilateralibus, utrinque obtusis, primum hyalinis et simplicibus dein brunneis et 1-3-septatis, 17-20 \times 7-8.

Hab. in ligno vetusto Aceris sp. in America bor. — A *Ch. pannicola* (B. et C.) ascis et sporidiis distincta.

2. *Chaetosphaeria caelestina* v. Höhn., Stzb. k. Ak. d. Wiss. Wien 4189
CXVIII, Abt. I (1908) p. 324, cum icon. — Subiculo parce evoluta; hyphis erectis, diaphane brunneis, septatis, rigidulis, 130-160 \times 5-6, apice in capitula 8-10 μ . diam. inflatis, basi bulbosis 12-20 μ . diam.; inspersis conidiis 6-cellularibus, brunneis, cellulis extimis obtusis, minutis, hyalinis, 40-48 \times 8-12, non constrictis; peritheciis pro more binatis, ovoideo-globosis, non collabescentibus, 340-360 μ . diam., 380 μ . alt., carbonaceis, fragilibus, crasse papillatis, vertice calvis, ceterum setulis laxis, rigidis, saepe sursum cur-

vis septatis, 140-180 \times 5-6, prope medium apiceque elliptico-inflatis; ascis clavatis, paraphysibus diffluentibus obvallatis, octosporis, 170-210 \times 16-18; sporidiis subdistichis tereti-fusoideis, curvulis, utrinque obtuse rotundatis, 6-cellularibus, 36-44 \times 7-8, non constrictis, brunneis, cellulis extimis minoribus hyalinis.

Hab. in ligno indurato arboris ignotæ in horto bot. Buitenzorg ins. Java. — Conidia verisimiliter cum statu ascophoro metagenetice connexa.

3. *Chætosphæria elegans* Rick, Broteria V (1906) p. 45. — Perithe- 4190
ciis subglobosis $\frac{3}{4}$ mm. diam., gregariis, atris, subiculo carbonaceo, brunneo, multiramoso-stellato insidentibus, pilis rigidis, atris, longis, a subiculo distinctis, usque ad ostiola obtectis, collabescens-
tibus; ascis clavatis 100 \times 10, apice incrassato, breviter pedicellatis; sporidiis cylindraceis, 10-14 \times 5-6, 3-septatis, septo crasso, vix
coarctato, cellulis ultimis hyalinis, ceteris brunneis, omnibus grosse
guttulatis; paraphysibus dilutioribus.

Hab. in ligno putrido, Rio Grande do Sul Brasilie. — *Acanthostigmatis* proxima sed sporidia et subiculum *Chætosphærie*.

SPORORMIA De Not. — Syll. II p. 123, IX p. 816, XI p. 329, XIV p. 577, XIV p. 526, XVII p. 737.

1. *Sporormia lata* Griffiths, Mem. Torr. Bot. Cl. XI (1901) p. 110, 4191
t. XVI, f. 10-12. — Peritheciis sparsis, hyphis rhizoideis arcte
adnatis, e subgloboso ovatis 600 \times 375; e membranaceo coriaceis,
nigris et opacis, apice subrostellatis; ascis octosporis, cylindraceis,
supra rotundatis infra in stipitem brevem crassiusculum angustatis,
260-320 \times 30-35; paraphysibus filiformibus, septatis, copiose ra-
mosis ascos subsuperantibus; sporidiis monostichis, ex ovoideo late
cylindraceis, utrinque rotundatis, 45-48 \times 16-18, quadricellularibus,
profunde constrictis sed non secedentibus, brunneis, strato mucoso
lato in aqua diffluente obductis.

Hab. in stercore Cuniculorum, Decorah Iowa Amer. bor.

2. *Sporormia vexans* Auersw. — Syll. II, p. 129 — var. *australis* 4192
Starb., Ascom. Schwed. Chaco-Cordill. Exp. Arkiv f. Botan. V
(1905) p. 16. — A typo satis dignoscitur: ascis 127-150 \times 19-20;
sporidiis 45-47 \times 9-10, loculo terminali superiore fere sphærioideo,
minute mucronatulo, 7,5 μ . diam., terminali inferiore conico, 10 \times 6;
tertio superiore latiore 7,5 \times 10.

Hab. in fimo, prov. Jujuy, Moreno Argentinae, 3500 m. s. m.

3. *Sporormia leguminosa* Fairm., Proc. Rochest. Acad. of Sc. IV 4193

(1906) p. 216, tab. XXI, fig. 1-5. — Peritheciis gregariis, pustulato-prominentibus, apice ostiolo subacuto v. subcompresso apertis; ascis clavato-cylindraceutis, paraphysibus filiformibus numerosis obvallatis, 140-150 \times 15-16; sporidiis brunneis juvenilibus maculis longitudinalibus coloratis demum omnino opacis, quadrilocularibus, irregulariter distichis, rectis v. curvulis, strato mucoso circumdati, 43-47 \times 10, loculis terminalibus 13 μ . long. mediis 10 μ . long.

Hab. in superficie interna leguminum Robiniae Pseudacaciæ, Lyndonville N. Y. Amer. bor.

GIBBERIDEA Fuck. — Syll. II p. 132, IX p. 820, XVI p. 1136, XVII p. 739.

1. *Gibberideia Bresadolæ* Rick, Fungi austro-amer. V, n. VI, Ann. 4194 Myc. V (1907) p. 31. — Peritheciis in maculis folii solitariis v. parce congregatis, atris, rugulosis, 1-2 mm. latis; ascis clavatis 100-150 \times 10-14; sporidiis fusoides plerumque utrinque appendiculatis, 30-70 \times 7-10, quadrilocularibus, fuscidulis, nucleatis, pluri-serialibus; paraphysibus linearibus sæpe dilutioribus.

Hab. in foliis Cupaniæ sp. in Brasilia Amer. austr.

2. *Gibberideia adesmicola* Speg., An. Mus. Nac. Buenos Aires t. XIX 4195 (1909) p. 365. — Peritheciis dense constipatis per corticis fissuras protrudentibus, subglobosis, 160-250 μ . diam., obsolete umbilicatis nitidulis; ascis cylindraceutis brevissime cuneato-pedicellatis, 100-200 \times 12-18, dense paraphysatis, octosporis; sporidiis subellipsoideis v. obsolete subclavulatis 22-26 \times 9-11, 3-septatis, ad septum medium constrictulis, fumosis.

Hab. ad ramos emortuos Adesmiarum specierum plurimarum lignosarum, Cacheuta, Uspallata et Puente del Juca, prope Mendoza, Argentina Amer. austr.

3. *Gibberideia turfosa* Syd, Mycoth. germ. fasc. XIV-XV n. 690 (1908), 4196 et in Ann. Mycol. VI (1908) pag. 479. — Peritheciis plerumque cæspitosis 2-5 dense congestis, raro tantum solitariis, primo peridermio tectis, dein erumpentibus, tandem subsuperficialibus, stromate non vel vix evoluto, globosis, carbonaceis, atris, ostiolo minuto papilliformi, 300-450 μ . diam.; ascis longe cylindraceutis, apice obtusis, breviter stipitatis, 85-115 \times 7-9, octosporis; paraphysibus numerosis, filiformibus, ascos superantibus; sporidiis monostichis, ovato-oblongis, utrinque obtusis, 3-septatis, ad septa lenissime constrictis, olivaceo-brunneis, 14-18 \times 4 $\frac{1}{2}$ -7.

Hab. in ramis emortuis Vaccinii uliginosi, Rotes Moor

pr. Gersfeld Rhöngelbirge Thuringiæ. — *Melanomma Lenarsii* in *Calluna*, convenit sporidiis 12-17 \approx 3,5-5, sed ejus perithecia *Melanommatis* genuini.

4. *Gibberidea Artemisiæ* Earle, Bull. of the New York Bot. Gard. 4197 (1904) p. 291. — Stromatibus brunneis angustis; peritheciis gregariis, 2-3 v. 6-8 in quoque stromate v. quandoque sparsis, subglobosis, demum leniter depressis, obscure fuscis, subnigris, nitidulis, circ. 500 μ . diam., ostiolo minute papillato; ascis cylindraceis 100-120 \approx 8-10; paraphysibus filiformibus; sporidiis subdistichis, cylindraceis, coloratis v. pallide fuliginis, 3-septatis, constrictis, curvis, 20-25 \approx 7.

Hab. in caulibus *Artemisiæ tridentatæ*, King's Canon prope Carson Nevada Amer. bor. (C. F. BAKER).

5. *Gibberidea alnicola* Rehm, Ann. Mycol. V (1907) p. 540. — Peritheciis sub cortice nidulantibus 4-12 arcte congregatis per rimas longitudinales corticis prorumpentibus demum fere sessilibus, globosis, minute papillulatis glabris, atris, poro conspicuo pertusis contextu parenchymatico, 0,3-0,4 mm. diam.; ascis cylindraceis, 90-100 \approx 8-9, octosporis; sporidiis subelavulatis, utrinque obtusis, rectis, 3-septatis, vix ad septa constrictis, cinereo-flavidulis, 12-15 \approx 4,5-5 monostichis, paraphysibus filiformibus 1 μ . crassis.

Hab. ad ramulum *Alni viridis*, Fürstenalp, Graubünden, Helvetia. (Dr. VOLKART).

7. *Gibberidea Zingiberacearum* Raciborski, Bull. Ac. Sc. Cracovie 4199 (1909) p. 385. — Stromatibus subepidermicis parvis, extus nigro-carbonaceis intus albis, irregulariter rotundatis; peritheciis globoso-ovoideis, quandoque forma irregularibus, levibus, nigris, ostiolo punctiformi epapillato præditis, primum stromate immersis, demum pro parte prominentibus, 110-130 μ . latis, 110-170 μ . long.; paraphysibus 2 μ . cr., septatis, hyalinis, cylindraceis; ascis breviter clavatis 75-80 \approx 8-10, octosporis, apice rotundatis, basim versus angustatis; sporidiis fuscoideis, primum bi-dein in eodem asco quadrilocularibus, medio constrictulis, utrinque lanciformi angustatis, rectis v. curvulis, levibus, pallide brunneis, 15-18 \approx 3,5.

Hab. initio plerumque parasitice in uredosoris ad folia *Amomi dealbati*, *Zingiberis* sp., *Alpinia*, *Curcumæ longæ*, prope Buitenzorg Java.

8. *Gibberidea Nipæ* P. Henn., Hedwigia XLVII (1908) p. 257. — Peritheciis superficialibus, liberis cæspitosis in stromate atro-crustaceo effuso dispositis, atro-carbonaceis, ovoideis, conico-ostiolatis

dein perforatis; ascis clavatis, vertice obtuso-rotundatis, 8-sporis, $90-110 \times 20$; sporidiis subdistichis, oblonge fusoides, utrinque obtusiusculis, 4-5-septatis, brunneis, $40-48 \times 8-10$.

Hab. in petiolis emortuis *Nipæ fruticantis*, Luzon, Prov. Pampanga, San Esteban, Ins. Philippin (MERRILL).

GILLOTIA Sacc. et Trott. (Etym. a cl. Doct. F. X. GILLOT, gallico, [1842-1910] mycologo et botanico egregio, præcipue de fungis superioribus apprime merito). — A genere *Diplothea* dignoscitur sporidiis tantum transverse 3-septatis nec muriformibus, demum olivaceo-brunneis et mucos, ut videtur, non inclusis.

1. *Gillotia orbicularis* (Syd.) Sacc. et Trott., *Diplothea?* *orbicularis* 4201
Syd., Ann. Mycol. V (1907) p. 357. — Peritheciis in greges plerumque orbiculares 3-10 mm. diam. dense confertis et plagulas atras efformantibus, atris, erumpentibus, superficialibus, subglobosis, rugulosis, ca $100-125 \mu$. diam.; ascis saccatis vel subclavatis membrana valde incrassata, aparaphysatis, $60-85 \times 20-30$ brevissime stipitatis, octosporis; sporidiis conglobatis, oblongis, 3-septatis, rectis vel leniter curvulis, primo hyalinis, tandem olivaceo-brunneis, $28-38 \times 8-11$.

Hab. in cortice *Cactaceæ*, Campinas Prov. Sao Paulo Brasiliæ.

Sect. 8. Hyalodictyæ.

PLEOSPHÆRULINA Pass. — Syll. XI p. 350, XIV p. 611, XVI p. 554, XVII p. 743.

1. *Pleosphærulina Briosiana* Pollacci - Syll. XVI p. 554 - var. *brasiliensis* Puttem. in Revista Agricola S. Paulo (1905) p. 17-20, fig. 13-15 extr. — Peritheciis innatis vix erumpentibus, ostiolo latiusculo obtuso præditis, $120-150 \mu$. diam.; ascis paucis ellipsoideis, sessilibus, utrinque obtusis, $80-90 \times 30-38$, octosporis; aparaphysatis; sporidiis subtristichis, ovato-oblongis utrinque obtusulis, triseptato-muriformibus, ad septa leviter constrictis, $25-30 \times 10-12$, e hyalino chlorinis.

Hab. in foliis *Medicaginis sativæ*, quam vexat, S. Paulo Brasiliæ.

2. *Pleosphærulina argentinensis* Speg. An. Mus. Nac. Buenos Aires 4203
t. XIX (1909) p. 387. — Maculis albescentibus orbicularibus vel

biformibus disseminatis; peritheciis amphigenis solitariis vel laxe gregariis innatis coriaceis, e lenticulari subglobosis 100-120 μ . diam., ostiolo majusculo impresso perforatis; ascis ovoideis subsessilibus 80-90 \times 40-45, octosporis, paraphysatis; sporidiis subellipsoideis 3-5-septato-muriformibus, ad septa leniter ad medium validius constrictis, 30-35 \times 12-16, hyalinis.

Hab. ad folia languida *Daturæ Stramonii*, Marmol prope Buenos Aires Rep. Argentina Amer. austr. — *Catharinice americanae* (Ell. et Ev.) Sacc. Syll. XI p. 350 affinis, notis plurimis tamen distincta.

3. **Pleosphærulina smilacicola** Speg., An. Mus. Nac. Buenos Aires 4204 t. XIX (1909) p. 387. — Maculis sæpius marginalibus amphigenis e cineresciente albido-arescentibus determinatis, areola angusta sordide subpurpurascente cinctis; peritheciis subsolitariis erumpenti-subsuperficialibus, sublenticularibus 100-150 μ . diam., atris, glabris, ostiolo minuto impresso pertusis; ascis subpiriformibus 70 \times 50, basi perminute papillato-pedicellatis, octosporis, paraphysatis; sporidiis ellipsoideo-oblongatis 5-septato-muriformibus, 35-40 \times 10-14, tunica mucosa crassa concolore vestitis, hyalinis.

Hab. ad folia languida *Smilacis campestris* in dumetis prope Jujuy Argentina, Amer. austr.

4. **Pleosphærulina Oryzæ** I. Miyake Pilze Reispfl. Japan (Journ. Col. lege Agricult. Tokyo II (1910) pag. 250, t. XIII, f. 23-25. — Peritheciis immersis, globosis v. ellipsoideis, nigris, crasse pseudoparenchymaticis 100-125 μ . diam.; ascis obvoideis, octosporis, 50-60 \times 30-35; sporidiis hyalinis transverse 4-5-septatis et 1-2 septis longitudinalis præditis, 25-32 \times 9-12.

Hab. in foliis albescentibus *Oryzæ sativæ*, Ehime, Japonia.

5. **Pleosphærulina Phragmitis** Rehm, Ann. Mycol. V (1907) p. 542 4206 — Peritheciis gregariis innatis globosis papilla minutissima prominente, atris, contextu membranaceo fusco, 0,3 mm. diam., demum plus minusve denudatis, sessilibus; ascis crasse tunicatis, clavatis vel piriformiter versus basim dilatatis, sessilibus, 150 \times 50-70, octosporis; sporidiis ovoideo-ellipsoideis, utrinque obtusis, primitus 3-, dein transverse 5-septatis, cellulis excl. terminalibus, semel longitudinaliter divisus, medio subangustatis, hyalinis, quarum cellula grosse 1-guttata, 40-45 \times 20, distichis; paraphysibus rarissimis, septatis, 5 μ . crassis, hyalinis.

Hab. ad culmos putridos *Phragmitis communis* in lacu Staffelsee prope Murnau alpium Baviaræ (REHM).

CATHARINIA Sacc. — Syll. II p. 275, IX p. 892, XI p. 350, XIV p. 611, XVI p. 554, XVII p. 743.

1. **Catharinia chilensis** Speg., Fungi Chilenses (1910) p. 84 cum ic. 4207

— Peritheciis sparsis subglobosis parvis ligno denudato plus minusve insculptis, subcarbonaceis, 250-400 μ . diam.; ascis clavulatis, deorsum modice tenuiterque attenuato-pedicellatis, paraphysatis, 160-180 \times 18-20; sporidiis submonostichis ellipsoideis sæpius leniter subnavicularibus, transverse 3-5-, longitudinaliter 1-septatis, parvis, hyalinis, 16-20 \times 7-9.

Hab. in ramis siccis corrosis Lithrææ causticæ Cerro Alegre de Valparaiso Chile Amer. austr.

2. **Catharinia tetraspora** v. Höhn. Fragm. Mykol. IX, in Sitzb. k. Ak. 4208

d. Wiss. Wien CXVIII (1909) Abt. I, pag. 1505. — Peritheciis carbonaceo-fragilibus, gregariis, contextu crassiusculo præditis, e globoso ventricos-conoideis, glabris, levibus, 300 μ . circa latis, epidermide tectis dein erumpenti-superficialibus; paraphysibus numerosis, filiformibus, ramosis, 1 μ . cr., fortiter mucosis; ascis tenuiter tunicatis, clavatis, supra rotundatis, basi sensim in pedicellum modice longum crassum angustatis, plerumque tetrasporis, 80-120 \times 14-17; sporidiis plerumque monostichis, raro distichis et tunc ascis brevioribus et crassioribus, hyalinis, 3-6-plerumque 5-septatis et interrupte longitudinaliter 1-septatis, ad septa non constrictis, subfusoides, 21-32 \times 7-12, plerumque 24-28 \times 10-12, tenuiter tunicatis.

Hab. ad culmos emortuos Bambusæ, in Horto bot. Buitenzorg in ins. Java.

3. **Catharinia Rostrupii** Berl. Icon. Fung. II, p. 100, t. 135, f. 2. — 4209

Peritheciis sparsis, globosis, ostiolo crassiusculo donatis, tectis, dein utramque folii paginam inflantibus, $\frac{1}{2}$ mm. diam., atris; ascis 140-160 \times 35-42; sporidiis oblongo-ovoideis, utrinque obtusulis, subinde inæquilateris, transverse triseptatis, 40-45 \times 16, hyalinis, mucos involutis, transverse 3-septatis, loculis mediis 1-2 septis longitudinaliter divis.

Hab. in foliis Poæ in Groenlandia (Rostrup in herb., sub *Metasphæria neglecta* [non Niessl]).

4. **Catharinia Pazschkeana** Rehm, Ann. Mycol. V (1907) p. 528. — 4210

Peritheciis in maculis hypophyllis irregularibus, cinereo-viridulis, interdum albidulis, ex epidermide folii decolorata formatis, 0,5-1,5 cm. diam. dispersis, interdum gregariis, sub epidermide nidulantibus ab eaque obtectis, globulosis, papillula minutissima promi-

nente, demum denudatis, atris, poro pertusis, subcarbonaceis, 400-500 μ . diam., senilibus scabris, fere sessilibus; ascis clavatis, crasse tunicatis, 100-110 \times 30-35, octosporis; sporidiis fusiformibus, transverse 2-4-8-, demum 15-septatis, perpendiculariter plerumque 3-4-septatis itaque muriformibus, hyalinis, interdum medio subconstrictis, 40-42 \times 12-14, di-tristichis; paraphysibus ramosis, 1 μ . latis, septatis, hyalinis.

Hab. in foliis *Adianti curvati*, Sao Francisco Brasiliæ (ULE, comm. doct. PAZSCHKE). — Sporidiis majusculis, crebro multi-septatis dignoscenda species.

BOERLAGELLA Penz. et Sacc. — Syll. XIV p. 612.

1. *Boerlagella argentinensis* Spegazz., An. Mus. Nac. Buenos Aires 4211 t. XIX (1909) p. 388. — Maculis nullis; peritheciis solitariis superficialibus subglobosis 250-300 μ . diam., circa ostiolum impressum eximie densiusculeque setuloso-penicillatis, pilis erectis rigidulis apice obtusiusculis, 100-180 \times 6-8, 3-septatis fuliginis pelucidis; ascis subcylindræis breviter pedicellatis, paraphysatis, octosporis, 200-230 \times 30-40; sporidiis ellipsoideis v. obsolete subovoideis transverse 3- verticaliter 1-septatis, ad septa transversa constrictulis 40-55 \times 18-22, diu hyalinis postremo pallide subchlorinis v. fumosis, mucosæ semper destitutis.

Hab. ad culmos aridos subputrescentes *Secalis cerealis*, La Plata Rep. Argentina. Amer. austr.

WINTERIA Rehm. — Syll. II p. 225 ex p., IX p. 870 (*Winterina* ex p.), XIV p. 612, XVI p. 554.

Teste cl. Höhnelt, Fragm. Myk. VIII (1909) p. 50-57 species huius generis heteroclyti pleræque emendandæ sunt. Nempæ:

- W. excellens Rehm, ipso auctore Rehmio consentiente, est *Odontotrema hemisphaericum* (Fr.).
- W. lichenoides Rehm, W. viridis Rehm et W. cembricola Rehm, sunt, teste v. Höhnelt, lichenes *Microglæne* Körb. peraffines.
- W. ordinata (Fr.) Sacc. esset = *Zignoella dolichospora* Sacc.
- W. tuberculifera E. et Ev. = *Winterina tuberculifera* (E. et Ev.) Sacc. Syll. XIV p. 589.
- W. Zahlbruckneri Bäuml. Est forte *Odontotrematis* species.
- W. culmigena Karst. et Maubl. = *Gibberella Saubinetii* (Mont.) Sacc.
- W. aterrima Hazsl., teste v. Höhnelt. est omnino dubia.
- W. rhoina Ell. et Ev. et W. crustosa Ell. et Ev. propius accedunt ad gen. *Leptospora* Penz. et Sacc.

W. lobata Fr. et Earl., opinante v. Höhn. potius Discomycetem quemdam sistit. *W. oxyspora* Penz. et Sacc., opinante eodem v. Höhn. melius diceretur *Bertia* (Rehmiomyces) *oxyspora* (P. et S.) v. Höhn. sed certe a typo *Bertiæ* omnino abhorret, hinc rectius sect. Rehmiomyces in genus proprium erigenda et tunc *R. oxysporus* dicendus.

1. *Winteria subcærulescens* (Nyl.) Rehm Ascom. n. 1242 (1898), Ver. 4212
rucaria subcærulescens Nyl. Flora 1872, p. 326 - Teste Rehm l. c. huc spectant: *W. cærulea* Ell. et Ev. - Syll. IX, pag. 910. — *Polyblastia acuminans* Nyl., Labouan (1891) p. 45, et teste prof. v. Höhnel (Fragm. VIII, p. 55) synonyma sunt quoque *W. laricina* v. Höhn. (1909) et *W. intermedia* Sacc. et Fautr. Verisimiliter sunt potius varietates v. formæ. Prof. v. Höhnel pro hac specie a Lichenibus certe distincta, nomen novum *Mycoglena* proponit sed prorsus inutiliter cum servari debeat *Winteria* Rehm emend.

JULELLA H. Fabre — Syll. II p. 289, IX p. 899, XVI p. 217.

1. *Julella Zenkeriana* P. Henn., Engl. Jahrb. XXXVIII (1905) p. 127. 4213

— Peritheciis gregarie sparsis cortice exteriori flavo-brunneo, in-crassato innatis, hemisphærico-superficialibus, flavo-brunneis, vertice anulato-discoideis. pallidis, ostiolo papillato atro prominulis, c. 1-1,5 mm. diam.; ascis late clavatis, crasse tunicatis, stipitatis, apice rotundato-obtusis, 2-4-sporis, 280-350 × 60-70, paraphysibus filiformibus, ramosissimis, hyalinis, c. 2 μ . cr.; sporidiis globatis cylindræis, utrinque rotundatis, longitudinaliter et transverse pluriseptatis, clathroideis, hyalino-flavidulis, 140-220 × 30-40.

Hab. in ramis corticatis, Bipindi Kamerun Africæ centr. (ZENKER). — *J. dactylosporæ* Rehm affinis, sed differt ascis stipitatis, sporidiis pallidioribus etc.

2. *Julella leopoldina* Rehm, Ann. Mycol. VI (1908) p. 319. — Peri- 4214
theiciis gregariis cortice innatis, epidermide arcte adnatis, plus minusve versus apicem denigratis, velatis, globosis ca. 1 mm. diam., ostiolo non papillato, perspicuo, poro pertuso, atris, excipulo fusco, subcarbonaceo; ascis clavatis, apice rotundatis, ca. 200 × 50, octosporis; sporidiis fusiformi-ellipsoideis, utrinque subacutatis, transverse 9-11(-13)-septatis, longitudinaliter 2-4-septatis, quaque cellula 1-guttata, flavidulis, dein brunneis, 70-85 × 20-25, senilibus atropurpureis, plicato-corrugatis, tristichis; paraphysibus septatis, 1 μ . crassis, subramosis, hyalinis, muco hyalino coalitis, iodi ope rubro-vinoso-tinctis.

Hab. ad ramos, Sao Leopoldo, Rio Grande do Sul Brasilie
(THEISSEN S. J.) — *Julella argentinae* subaffinis.

3. *Julella luzonensis* P. Henn., Hedwigia XLVII (1908) p. 257. — 4215
Peritheciis gregariis cortice nidulantibus, simplicibus, globuloso-depressis, atro-carbonaceis, papillatis, vertice poro pallido perforatis, 1-1 1/2 mm. diam.; ascis clavatis 40 μ . c. cr., 2-raro 4-sporis; paraphysibus copiosis, filiformibus, 2 μ . c. cr.; sporidiis monostichis cylindraceis v. fusioideis, utrinque obtuso-rotundatis, 12-16-septatis, clathrato-reticulatis, atro-brunneis, 80-120 \times 20-23.

Hab. in cortice arboris indet. Luzon, Prov. Benguet, Ins. Philippin., mart. 1904 (ELMER).

PELTOSPHERIA Berl. — Syll. IX p. 898, XVII p. 744.

1. *Peltosphaeria vitrispora* (C. et H.) Berl. — Syll. IX, p. 898. — 4216
forma *Oleæ* v. Höhnelt, Fragm. z. Mykol., Sitzb. k. Ak. d. Wiss. Wien, Bd. CXVI, Abt. I (1907) p. 624. — A typo præcipue differt matrice et sporidiis distichis (ascis 100-120 \times 22-25).

Hab. in ramulis *Oleæ europææ*, in ins. Corcyra [Corfu] (EGGERTH)

TEICHOSPORELLA Sacc. — Syll. II p. 303, IX p. 908, XI p. 351, XVII p. 744.

1. *Teichospora callimorpha* Syd., Deutsche Zentral-Afrika Exped. 4217
1907-1908 II Bd. (1901) p. 99. — Peritheciis superficialibus, dense gregariis, globosis, e mutua pressione sæpe irregularibus, 1/2-3/4 mm. diam., obscure brunneis, carbonaceis, ostiolo papilliformi impresso præditis; ascis cylindraceo-clavatis, apice rotundatis, parum incrassatis, p. sp. 140-175 \times 20-35, stipite c. 70 μ . longo præditis, octosporis; paraphysibus numerosis, filiformibus; sporidiis distichis, transverse 10-18-septatis, quaque cellula longitudinaliter 2-3 septata, hyalinis, elongato-ellipsoideis, v. subfusiformibus utrinque leniter attenuatis, sed obtusulis, 45-65 \times 12-18, haud constrictis.

Hab. in ramulis Leguminosæ cujusdam, Beni Africæ trop.

Sect. 9. Phæodictyæ.

PLEOSPORA Rabenh. — Syll. II p. 241, IX p. 873, XI p. 342, XIV p. 594, XVI p. 544, XVII p. 747.

1. *Pleospora herbarum* (Pers.) Rab. — Syll. II, p. 247. — Var. Co- 4218

ryphæ Cav. et Moll., Atti Ac. Gioenia Sc. Nat. XIX, Mem. II (1906) Extr. p. 29, cum tab. — A typo differt peritheciis globoso-conoideis numquam collabescentibus, ostiolo in collum prelongum, cylindraceum, arcuatum protracto.

Hab. in foliis *Coryphæ australis* quam valde vexat in Horto Botanico Catania, Siciliæ. — Var. **Galii** Lamb. Rev. myc. XIII (1891) p. 1, t. 112, f. 7 (Notæ et ic. biolog.). — In caule *Galii Aparines* in Belgio. — Var. **Cheiranthi** Cocc. et Mor., Funghi di Bologna Cent. II, n. 196, t. un., fig. 4 (*P. Cheiranthi*). — Peritheciis globosis $\frac{1}{2}$ mm. diam.; ascis 145-160 \times 24-30; sporidiis ovato-oblongatis, 33-36 \times 14-16, luteo-brunneis, 7-septatis crebreque muriformibus. — In siliquis *Cheiranthi Cheiri* in Italia bor. — Var. **Liriodendri** Berl., N. Giorn. bot. it. XX (1888) p. 100, t. V, f. 3. — Peritheciis minoribus; ascis clavatis 110-120 \times 20-24; sporidiis elongato-oblongis, 32-36 \times 14-16, luteis, 7-septatis parceque muriformibus. — In foliis emortuis *Liriodendri* in Lusitania (MOLLER). — Var. **Marrubii** Berl. l. c. p. 100, t. V, f. 6. — Peritheciis majusculis 500 μ . diam., papillatis; ascis 110-130 \times 28-30; sporidiis utrinque acutulis, 30-32 \times 10-12, flavis, 7-8-septato-muriformibus. — In caulibus *Marrubii vulgaris* in Italia boreali (PASSERINI). — Var. **Psoraleæ** Berl., l. c. p. 100, t. V, f. 4. — Peritheciis globoso-depressis, obtuse papillatis, 300 μ . diam.; ascis 70-80 \times 22-24; sporidiis 7-septatis parceque muriformibus, 28-30 \times 12-14, luteis. — In caulibus *Psoraleæ bituminosæ* pr. Neapolim (herb. SACCARDO). — Var. **subsulcata** (Ell. et Ev.) Sacc. et Trav. — Syll. XX, p. 439 — *Pl. subsulcata* Ell. et Ev., in Proc. Roch. Acad. (1900) pag. 44, t. IV, f. 1-2, *Pl. herbarum* forma Fairm., l. c. (1905) p. 182. — Sporidiis 6-7-septato-muriformibus, strato hyalino crasso obductis. — In caule *Allii*? New York Amer. bor. — var. **coluteicola** P. Henn., Verh. Bot. Ver. Prov. Brandenb. XLVII (1905) p. XI. — Peritheciis depresso globosis, nigris, 200-260 μ . diam.; ascis oblongo-clavatis 100-160 \times 20-40, octosporis; sporidiis subdistichis, oblongo-clavatis, raro subfusoides, uno v. binis apicibus acutatis, 5-7- raro 8-septato-muriformibus, 25-40 \times 11-18. — In ramulis emortuis *Coluteæ arborescentis* prope Lanke in Brandenburg.

2. **Pleospora Lepidii** Hollós, Ann. Mus. Nat. Hung. V (1907) p. 454. 4219

— Peritheciis dense gregariis, erumpentibus, nigris, glabris, superne depressis, ostiolo breve cylindraceo donatis, 320-380 μ . diam.; ascis cylindraceis, apice rotundatis, breve stipitatis, 2-4-plerumque

4-sporis, 100-120 \approx 12-16, filiformi paraphysatis; sporidiis oblique monostichis, fusoides, 5-7-septatis, ad septum medianum constrictis, longitudinaliter 1-3-septatis, flavis 24-30 \approx 8-10.

Hab. in caulibus siccis Lepidii crassifolii prope Kecs-kémét Hungariæ.

3. **Pleospora minuta** Kirschst., Verh. Bot. Ver. Brandenb. XLVIII 4220 (1906) p. 56. — Peritheciis plerumque sparsis, punctiformibus, breviter papillatis, nigris, membranaceis, levibus, subepidermicis dein superficialibus, globosis, demum applanato-collabescentibus; ascis clavatis, brevissime pedicellatis, supra rotundatis, 80 \approx 10-12, octosporis; sporidiis supra distichis infra monostichis, fusoides, utrinque rotundatis, quandoque etiam inæquilateris, flavis, demum obscure brunneis, transverse 5-9-septatis et quandoque imperfecte longitudinaliter 1-septatis, ad septa constrictulis, 18-25 \approx 6; paraphysibus numerosis, filiformibus, ramosis, hyalinis.

Hab. in caulibus siliquisque Erysimi repandi prope Rathenow Germaniæ.

4. **Pleospora tessellata** Ferdinands. et Winge, Botan. Tidsskrift 29 4221 Bd. (1909) p. 319, fig. 8. — Peritheciis per corticem erumpentibus, demum superficialibus, applanatis, depressis vel pezizoideo-collapsis, ambitu circulari v. parum elongato, $\frac{1}{4}$ - $\frac{1}{2}$ mm. diam., nigris; ascis maturis ellipsoideo-saccatis, e pressione sporidiorum hinc inde irregulariter bullatis, parte spor. 120-140 \approx 60-75; sporidiis octonis, disticho-conglobatis conglobatisve, ovoideis, utrinque truncatis, medio parum constrictis, transverse constanter 7-septatis, septis longitudinalibus, in fronte qualibet sporidii ternis visis regulariter tessellatis, 40-50 \approx 21-26, obscure brunneis, demum impellucidis, tunica mucosa persistenti, ad 4 p. cr. hyalina indutis.

Hab. ad ramulos siccos corticatos Zygo-phylleacearum sp. in Chile (CUMING).

5. **Pleospora Xanthoceratis** Hollós, Ann. Mus. Nat. Hung. IV (1906) 4222 p. 334. — Peritheciis sparsis, superficialibus, depresso-globosis, nigris, 280-320 μ . diam., contextu parenchymatico; ascis cylindræo-clavatis, breve stipitatis, octosporis, 160-180 \approx 24-32; paraphysibus filiformibus, septatis; sporidiis monostichis, vel inordinate distichis, oblongo-ellipsoideis, melleis, 3- dein 7-septatis, muriformibus, medio constrictis, 32-38 \approx 16-18.

Hab. in ramulis emortuis Xanthoceratis sorbifolii culti, Kecs-kémét Hungariæ.

6. **Pleospora oligasca** Bubák, Bull. Herb. Boiss. 2. sér. VI (1906) 4223

p. 401. — Peritheciis plus v. minus crebre distributis, globosis, supra collo plus minusve elongato auctis, circ. 90 μ . diam., nigris, parietibus crassis donatis, primum subepidermicis dein collo erumpentibus, contextu brunneo-nigro distincte parenchymatico; ascis paucis, late ovoideis, utrinque angustatis, $45 \times 22-24$, crasse tunicatis, supra rotundatis incrassatisque, infra breviter pedicellatis, octosporis; sporidiis elongatis $26-31 \times 8,5-11$, flavidulis, transverse 5-6-septatis, parte superiore 2-3-septata et $8,5-11 \mu$. lata, inferiore 4-septata et $6,5-9 \mu$. tantum lata.

Hab. in inflorescentiis siccis *Helianthemum* canis var. acutifolii, M. Gradiste prope Kolasin Montenegro, 2000 m. alt. — A *Pl. Fumance* diversa.

7. **Pleospora Silenes** Earle, Bull. of the New York Bot. Gard. (1904) 4224

p. 194. — Peritheciis gregariis in maculis nigricantibus insidentibus, prominentibus, cuticula mox lacerata erumpentibus, nigris, collabescentibus, 200 μ . circ. diam., ostiole minute papillato, inconspicuo; ascis cylindraceutis v. anguste ellipsoideis, breviter stipitatis, crasse tunicatis, circ. 140×30 ; paraphysibus filiformibus, angustis; sporidiis distichis, ovoideis v. ellipsoideis, compressis, obscure brunneis, 3-septatis, una v. binis cellulis mediis septo verticali divisus, ad septa constrictis, apice obtusis, circ. $30-35 \times 14-18$.

Hab. in caulibus emortuis *Silenes* sp., Clear Creek Cañon prope Carson, Nevada Amer. bor. (C. F. BAKER).

8. **Pleospora Colobanthi** P. Henn., Deutsche Südpolar Exped. Bd. 4225

VIII (1906) Extr. p. 12, tab. II, fig. 10 a-b. — Peritheciis sparsis, innato-suberumpentibus, depresso-globosis, poro pertusis, atro-membranaceis, c. $150-180 \mu$. diam.; ascis clavatis, apice obtuse rotundatis, octosporis, $90-110 \times 20-30$; sporidiis subdistichis v. subtristichis, oblongis, utrinque rotundatis, 6-7-septatis, medio constrictis, muralibus, $25-30 \times 12-15$, melleis dein fusco-brunneis.

Hab. in foliis *Colobanthi kerguelensis*, Kerguelen Vanhöffen-Insel (Dr. VANHÖFFEN).

9. **Pleospora Alsines** Hollós, Ann. Mus. Nat. Hung. IV (1906) p. 332, 4226

tab. VIII, fig. 5. — Peritheciis sparsis, depresso-globosis, nigris, ostiolo brevi cylindraceuto, $210-240 \mu$. diam.; ascis clavatis, breve stipitatis, 8-sporis, $80-100 \times 14-16$; paraphysibus filiformibus, septatis; sporidiis oblique monostichis v. inordinate distichis, oblongo-ellipsoideis, melleis, dein castaneo-umbrinis, 3-septatis, ad septa constrictis, loculo uno vel duobus intermediis longitudinaliter divisus, $20-28 \times 8-12$.

Hab. in foliis siccis *Alsines vernæ* prope Keckskemét Hungariæ. — A *Pleospora nivalis* Niessl diversa.

10. *Pleospora Cerastii* Feltg., Vorst. Pilzfl. Luxemb. Nachtr. IV (1905) 4227 p. 84. — Peritheciis sparsis, omnino tectis, vix papillulatis, globoso-depressis, brunneis, basi hyphis brunneis limitatis, 0,2-0,25 mm. dm., contextu flavo-brunneo grosse parenchymatico; ascis clavatis, breviter crasseque pedicellatis, supra late rotundatis v. subattenuatis, octosporis, 80-108 \times 16-21, paraphysibus filiformibus obsitis; sporidiis distichis, ellipsoideo-fusoideis, obtusis, rectis v. curvulis, 5-septatis, ad septa constrictulis, oculis mediis longitudinaliter uniseptatis, flavis, guttulatis, 22-27 \times 8-9.

Hab. in foliis caulibusque *Cerastii tomentosi*, Mahlberg Luxemburgia.

11. *Pleospora cereicola* Speg., Fungi Chilenses (1910) p. 85. — Peritheciis sparsis ligno denudato plus minusve infossis subglobosis coriaceo-membranaceis, atris opacis, 150-180 μ . diam.; ascis cylindraceis breviter pedicellatis paraphysatis, 120-130 \times 12; sporidiis obovatis fusco-fuligineis parvis, transverse 3-septato-constrictulis, septis 1 v. 2 longitudinaliter divis, 14-16 \times 8-9. 4228

Hab. in ligno emortuo *Cerei Quisco* in collibus prope Batuco Chile Amer. austr. — *Pl. Saccardianæ* Berl. affinis.

12. *Pleospora opunticola* Bubák, Bull. Herb. Boiss. 2 sér. VI (1906) 4229 p. 401. — Peritheciis in maculis magnis griseo-cinereis sparsis v. gregariis, epidermide diu tectis, dein collo 100-120 μ . lato erumpentibus, globosis, 300-400 μ . latis, nigris, contextu crasso, parenchymatico, infra olivaceo-brunneo supra nigricante; ascis cylindraceis, 90-130 \times 10-11, supra rotundatis basi in pedicellum brevem tenuatis, rectis v. curvis, crasse tunicatis, octosporis, hyalinis, paraphysibus filiformibus numerosis obsitis; sporidiis elongatis, 15,5-18,5 \times 6,5-7,5, triseptatis et septo longitudinali plus minusve evoluto donatis, medio fortiter constrictis, utrinque rotundatis, flavo-brunneis, oblique monostichis v. supra subdistichis.

Hab. in cladodiis vivis *Opuntiae Fici-indicæ* prope Ucinj Montenegro.

13. *Pleospora trevoicola* Speg., Fungi Chilenses (1910) p. 92, cum 4230 icon. — Peritheciis sparsis v. laxè gregariis, primo cortice tectis, dein denudato-subsurfacealibus, subhemisphæricis non papillatis, atris glabris v. hyphis paucis radiantibus cinctis, membranaceis, 150-180 μ . diam.; ascis e cylindraceo subelavulatis brevissime pedicellatis, paraphysatis, octosporis, 100-120 \times 25-30; sporidiis pro-

teiformibus, ellipsoideo-didymis v. subclavulatis, transverse 1,3,5,7-septato-constrictulis, loculis nullis, paucis v. omnibus septis 1 vel 2 longitudinalibus divis, primo flavis dein fuliginis, 25-32 \times 10-14.

Hab. in ramulis siccis *Trevoæ* trinervis in collibus San Bernardo prope Santjago Chile Amer. austr.

14. **Pleospora Trevoæ** Speg., Fungi Chilenses (1910) p. 86. — Po- 4231
 ritheciis primo epidermide tectis, dein subsuperficialibus nudis, laxe gregariis, lenticulari-hemisphaericis, parvis, ostiolo minute papillato ornatis, atris glabris carbonaceis, 150-180 μ . diam.; ascis cylindraceis breviter pedicellatis, densiuscule paraphysatis, 150 \times 12; sporidiis oblique monostichis, ellipsoideo-subovatis, mediocribus, fuliginis, transverse 3-septatis, ad septum medium constrictis, loculis centralibus septo altero longitudinali divis, 18-24 \times 8-10.

Hab. in ramis siccis *Trevoæ* trinervis in collibus San Bernardo prope Santjago Chile Amer. austr. — *Pl. Saccardianæ* Roum. affinis sed differt ascis et sporidiis majoribus.

15. **Pleospora ligni** Kirschst., Verh. Bot. Ver. Prov. Brandenb. XLVIII 4232
 (1906) p. 57. — Peritheciis in greges dispositis, ligno immersis, ostiolo prominentibus, nigris, membranaceis, 200-300 μ . diam.; ascis cylindraceo-clavatis, in pedicellum brevem tenuatis, supra rotundatis, plerumque 200 \times 24, quandoque etiam duplo longioribus, octosporis; sporidiis infra mono- supra distichis, fusoidis, pallide dein obscure brunneis, plerumque transverse 9- longitudinaliter 2-septatis, non constrictis, 36-45 \times 12-15; paraphysibus hyalinis, filiformibus, septatis, ad septa constrictis.

Hab. in ligno denudato *Rhamni* Frangulæ prope Rathe-
 now Germania.

16. **Pleospora Evonymi** Fuck. — Syll. II, pag. 258 — f. *ramealis* 4233
 Feltg., Vorst. Pilz-Fl. Luxemb. IV (1905) pag. 86. — A typo differt peritheciis non depressis, vix papillatis; ascis sporidiisque majoribus.

Hab. in ramis corticatis *Evonymi* europæi, Luxemburgia.

17. **Pleospora Acænæ** P. Henn., Deutsche Südpolar-Exped. Bd. VIII 4234
 (1906) Extr. p. 11, tab. II, fig. 8 a-b. — Peritheciis sparsis, innato-erumpentibus, subglobosis, atro-membranaceis, subpapillatis, porosis, 150-180 μ .; ascis fusoides-clavatis, apice attenuatis, rotundato-obtusis, 70-80 \times 12-16, octosporis; paraphysibus filiformibus, hyalinis, septatis; sporidiis oblique monostichis v. subdistichis, oblonge fusoides v. clavatis, utrinque obtusiusculis, primo hyalinis,

continuis v. medio 1-septatis, deinde fuscidulis, 7-septatis, interrupte muralibus, 20-25 \times 5-6.

Hab. in ramis decorticatis *Acænæ* ascendente, Kerguelen Magnetbergis (E. WERTH).

18. *Pleospora rudis* Berl. in N. Giorn. bot. ital. XX (1888) p. 45, 4235 t. I, f. 12, Ic. fung. II, p. 9, t. X, f. 1. — Peritheciis atris, epidermide tectis, globoso-conoideis, 300 μ . diam., ostiolo obtusissimo vix conspicuo suberumpentibus; ascis oblongo-clavatis in stipitem nodulosum abeuntibus, 90-100 \times 27-30, octosporis; sporidiis subdistichis, ovoideo-oblongis, utrinque rotundatis vel deorsum tenuatis, medio subconstrictis, sursum crassioribus, 4-septatis parceque muriformibus, 28-32 \times 12-14, fuligineis.

Hab. in caulibus emortuis *Astragali* *Johannis* in montibus Persiæ australis.

19. *Pleospora aureliana* Fairman, Ann. Mycol. IV (1906) pag. 328, 4236 fig. 3. — Peritheciis sparsis, erumpenti-superficialibus, minutis, depresso-globosis, atris; ascis oblongo-clavatis, apice late rotundatis, breve noduloso-stipitatis, octosporis, 113 \times 20-23; paraphysibus filiformibus; sporidiis subellipsoideis, medio constrictis, 6-9-septatis, sursum crassioribus, muriformibus, guttulatis, distichis, initio hyalinis vel pallide flavis, deinde fuscis, 27-30 \times 10-13.

Hab. in superficie externa leguminis *Robiniae* *Pseudacaciæ*, Lyndonville Orleans C. (= *Aurelia*, unde nomen speciei), New York America bor. — A *Pleospora leguminum* satis diversa.

20. *Pleospora Spinosæ* Rolland, Bull. Soc. Mycol. Fr. (1905) p. 25, t. I, 4237 f. 3. — Peritheciis gregariis, cortice infossis, epidermidem pustulatim inflatam ostiolo papillato perforantibus, subglobosis, 0,2-0,5 mm. diam., contextu parenchymatico; ascis tereti-clavatis 100-150 \times 10-12, octosporis, filiformi-paraphysatis; sporidiis monostichis, oblongis, utrinque paullulo rotundato-tenuatis crasse 3-4-septatis parceque muriformibus, ad septa, præsertim medium, constrictis, rufis, 18 \times 8.

Hab. in ramulis *Calycotomæ spinosæ*, Sa Coma et Como negra in insul. Balearibus.

21. *Pleospora persica* Syd., Ann. Mycol. VI (1908) p. 18. — Peritheciis sparsis vel aggregatis, diutius epidermidem tectis, atris, depresso-globosis, 200-350 μ . diam., membranaceis, basi hyphis fuscis septatis præditis, glabris; ascis variæ formæ, plerumque saccatis vel late cylindræis, sæpe varie curvis, subsessilibus, 110-200 \times 30-55, octosporis; sporidiis irregulariter distichis, subclavatis, to-

tis transverse 8-9-septatis, ad septum tertium superum plerumque valde constrictis ideoque quasi e duobus segmentis constantibus, segmento supero brevioris sed crassioris, infero multo longioris sed angustioris, longitudinaliter 1-2-septatis, brunneis, totis 42-58 \approx 12-21, segmento supero apice rotundato ibique membrana hyalina valde incrassata (usque ad 5 μ .) prædito.

Hab. in caulibus siccis *Diploëniæ cachrydifoliæ*, ad Jaila Assalek inter Asadbar et Gerab, Elbrus occident. Persiæ (J. BORNMÜLLER).

22. *Pleospora intermedia* Speg., *Fungi Chilenses* (1910) pag. 88. — 4239

Peritheciis sparsis epidermide plus minusve dealbata tectis, lenticulari-conoideis, vix papillato-ostiolatis, atris, coriaccis, 150 μ . diam.; ascis clavulatis, modice pedicellatis, densissime paraphysatis, 100-120 \approx 14-16, octosporis; sporidiis anguste ellipsoideo-subcylindraceis, transverse 5-septatis, ad septa, ad medium præcipue, constrictulis, mediocribus, olivaceis, loculis, 1-2 v. 4 centralibus septo altero continuo divisus, 20-24 \approx 8-10.

Hab. in pedunculis siccis *Asteriscii chilensis*, Cerro Caracol de Concepcion Chile Amer. austr. — *Pleospora medicæ* affinis sed distincta.

23. *Pleospora kerguelensis* P. Henn., *Deutsche Südpolar-Exped.* Bd. 4240

VIII (1906) Extr. p. 11, tab. II, fig. 9 a-b. — Peritheciis sparsis, innato-erumpentibus, subglobosis v. ovoideis, atro-membranaceis, subpapillato-pertusis, 150-200 μ . diam.; ascis late clavatis, vertice rotundato obtusis, ad basim attenuatis, 140-185 \approx 20-30, octosporis; paraphysibus filiformibus, pluriseptatis, submoniliformibus, hyalinis, 3-4 μ . cr.; sporidiis oblique monostichis vel subdistichis, oblonge ellipsoideis v. subfusoides v. subclavatis, obtusis, melleis dein fusco-brunneis, 7-septatis, 2-3-interrupte muraliformi-divisis, cellulis constrictiusculis, medio haud constrictis, 30-40 \approx 11-15.

Hab. in foliis *Azorellæ Selaginis*, Kerguelen, Grüne Insel (E. WERTH).

24. *Pleospora Jaapiana* Rehm, in Jaap Abh. Bot. Ver. Prov. Bran- 4241

denb. II (1907) p. 16. — Peritheciis gregariis, primum immersis dein liberis, sessilibus, globoso-conoideis breviter ostiolato-papillatis, demum collabescendo depressis, levibus, membranaceis, 250-300 μ . d.; ascis elongato-clavatis, supra rotundatis, 150-180 μ . long., 40-45 μ . cr., octosporis; sporidiis elongatis, utrinque acutatis, fere parallelogrammicis, medio quandoque constrictulis, primum 3-dein 7-septatis, cellulis intermediis crassioribus, nucleos crassos

oleosos includentibus, flavo-stramineis, 42-55 (plerumque 45) \times 17-22, distichis; paraphysibus filiformibus, septatis, hyalinis.

Hab. in caulibus siccis vetustis *Plantaginis maritimæ*, in Ins. Röm Schleswig-Holst., Germania. — Ob sporidia parallelogrammiformia, nec ovoidea v. fuscoidea, ab affinibus speciebus distincta.

25. *Pleospora breviasca* Berl. in N. Giorn. bot. it XX (1888) p. 45, 4242 t. I, fig. 14, Ic. fung. II, p. 9, t. X, f. 3. — Peritheciis sparsis, minutis, 200 μ . diam., epidermide velatis, ostiolo papillato-conoideo erumpentibus; ascis oblongis, brevissime et crasse noduloso-stipitatis, octosporis, 70-80 \times 22-24; sporidiis subdistichis ovoideo-oblongis, utrinque rotundatis, medio leniter constrictis, 24-28 \times 13-15, transverse 5-septatis, septis mediis ternis primariis multo crassioribus, loculis septo longit. divisis, melleis, mucro obvolutis.

Hab. in ramulis *Euphrasie luteæ*, Vigheffio pr. Parmam Ital. bor. (PASSERINI).

26. *Pleospora magnifica* Peck, Bull. Torr. Bot. Cl. XXXIII (1906) 4243 p. 221. — Peritheciis minutis, primum epidermide tenui tectis, dein erumpentibus v. subsuperficialibus, hemisphæricis v. depresso globosis, nigris, ostiolo minuto inconspicuo præditis; ascis oblongis, cylindræis, 200-240 \times 48-60; sporidiis magnis, coloratis, confertis v. distichis, oblongis v. uno apice leniter angustatis, obtusis, 7-9-septatis et septis 3 longit. præditis, 65-75 \times 25-35.

Hab. in caulibus siccis *Phlogis* sp., Silver Lake, Utah Amer. bor. (A. O. GARRETT).

27. *Pleospora Asclepiadeorum* Mac Alp., Austral. Fungi Dec. I-II, 4244 pag. 378 (Proceed. Linn. Soc. New S. Wal. 1902) — Peritheciis subgregariis, epidermide tectis, dein partim nudatis, minutis, nigris, punctiformibus, globosis, 190-225 μ . diam. ostiolo minuto; ascis oblongo-cylindræis, apice rotundatis, 100 \times 17-19, in basim nodulosam tenuatis; paraphysibus hyalinis, ascum æquantibus, apice usque ad 11 μ . dilatatis; sporidiis distichis v. partim submonostichis, ellipsoideis, 5-septatis, ad septa constrictis, septis longitudinalibus quaternis partitis seu muriformibus, 28-30 \times 10-12, olivaceis.

Hab. in foliis *Hoyæ carnosæ* in Australia merid. (MOLINEUX). — Inter perithecia adsunt hyphæ septatæ, ramosæ, fumoso-brunneæ.

28. *Pleospora robusta* Speg., An. Mus. Nac. Buenos Aires t. XIX 4245 (1909) p. 390. — Peritheciis primo cortice tectis dein denudato-

superficialibus subcarbonaceis e lenticulari subglobosis 150 μ . diam.; ascis subcylindraceis vix pedicellatis 7-10 in quoque perithecio 100 \approx 30-40, pseudoparaphysibus paucis commixtis; sporidiis tristichis utrinque obtusis 28-34 \approx 14-18, 3-septatis, ad septa, ad medium praecipue, constrictis, longitudinaliter 1-septatis, primo lutescentibus serius subopace fuliginis.

Hab. ad ramulos emortuos Menodoræ robustæ in aridis secus Rio Chubut Argentina America austr.

29. **Pleospora Boldoæ** Speg., Fungi Chilenses (1910) p. 87. — Peri- 4246
theeciis sparsis subepidermicis lenticularibus coriacellis, minutis, atris, 120-180 μ . diam.; ascis cylindraceo-subclavulatis, paraphysatis modice pedicellatis, p. spor. 80 \approx 13-14, totis usque ad 100 μ . long.; sporidiis subellipsoideis fusco-fumosis submediocribus, 3-septatis ad medium constrictis, loculis 1-2 centralibus septo altero verticali saepius divisus, 17-19 \approx 7-8.

Hab. in ramulis siccis Boldoæ fragrantis pr. Talcahuano Chile Amer. austr.

30. **Pleospora osyridigena** Bubák, Bull. Herb. Boiss. 2. sér., VI (1906) 4247
p. 402. — Peritheciis in cortice sub epidermide infossis, dein prominulis, globosis, 300-450 μ . latis, nigris, contextu crasso nigro minute parenchymatico; ascis cylindraceis 120-140 \approx 11-13, supra rotundatis infra in pedicellum brevem angustatis, octosporis, paraphysibus longissimis, filiformibus, tenuibus obsitis; sporidiis fusoides, elongatis, 16-24 \approx 6,5-8,5, ex olivaceo-brunneis pallide castaneo-brunneis transverse 3-4 raro usque ad 5-septatis et septo longitudinali plus v. minus distincto praeditis, non v. leniter constrictis, apice saepe acutatis v. rotundatis, monostichis v. supra subdistichis.

Hab. in ramis emortuis Osyridis albæ prope Uleinj Montenegro.

31. **Pleospora Onosmatis** Hollós, Ann. Mus. Nat. Hung. IV (1906) 4248
p. 333, tab. VIII, fig. 4. — Peritheciis gregariis sparsisque epidermide tectis, dein superficialibus, depresso-globosis, glabris, nigris, ostiolo brevi cylindraceo, 280-350 μ . diam.; ascis cylindraceo-clavatis, breve stipitatis 2-4-6-8-sporis, 60-100 \approx 12-16; paraphysibus filiformibus, septatis; sporidiis oblique monostichis v. distichis, oblongo-ellipsoideis, flavis, 7-septatis, ad septa constrictis, loculis 1-2-3 longitudinaliter septis divisus, 34-44 \approx 10-12 in ascis bisporis, 30 \approx 8 in ascis 4-6-8-sporis.

Hab. in caulibus siccis *Onosmatis arenarii* prope Izsák Hungariæ.

32. **Pleospora Sideritidis** Hollós, Ann. Mus. Nat. Hung. V (1907) 4249

V p. 455. — Peritheciis sparsis, epidermide tectis, depresso-globosis, fuscis, ostiolo papillato, 150-180 μ . diam.; ascis clavatis, breve stipitatis, 8-sporis, 110-140 \times 40-60, filiformi-paraphysatis; sporidiis 2-3-stichis, oblongo-ellipsoideis, 7-septatis, ad septum medium validius constrictis, in longitudine imperfecte uni-septatis, hyalinis, 46-50 \times 20-22.

Hab. in foliis languidis *Sideritidis montanæ* pr. Kecske-mét Hungariæ. — An potius *Cathariniae* sp.?

33. **Pleospora Helichrysi** Hollós, Növényt. Közlemén. VI (1907) Extr. 4250

p. 3. — Peritheciis gregariis sparsisque, superficialibus, globoso-depressis, glabris, nigris, minute papillato-ostiolatis, 280-350 μ . diam., contextu parenchymatico; ascis clavatis, breve stipitatis, octosporis, 100-120 \times 12-14; paraphysibus filiformibus, septatis; sporidiis oblique monostichis v. inordinate distichis, clavatis, parte superiore crassiore, deorsum leniter attenuatis, rectis v. sæpe curvulis, 5-6-septatis, ad medium valde constrictis, loculis 1-2-3 longitudinaliter v. oblique divisis, flavidulis, 24-30 \times 7-10.

Hab. in caulibus siccis *Helichrysi arenarii* prope Kecske-mét Hungariæ.

34. **Pleospora Proustiae** Speg., An. Mus. Nac. Buenos Aires t. XIX 4251

(1909) pag. 392. — Maculis nullis sed ligno toto cinerescente et rimuloso; peritheciis ligno denudato subsuperficialibus, membranaceis in sicco corrugato-contractis, laxè gregariis v. subseriatis, globuloso-conoideis, 200-250 μ . diam.; ascis ellipsoideo-subclavulatis, subsessilibus 140-150 \times 30-32, parcissime paraphysatis, octosporis; sporidiis elliptico-didymis, 38 \times 18, muriformibus, septis transversis 7, longitudinalibus 1-3 interruptis, primo flavescentibus dein fuliginis, rectis v. leniter inæquilateralibus.

Hab. ad ramos vivos v. languidos *Proustiae ilicifoliae* in præandinis Cacheuta prope Mendoza Rep. Argentina Amer. austr. — Notis nonnullis externis ad *Teichosporam* vergit, sed peritheciis membranaceis sporarumque fabrica melius sub *Pleospora* militat.

35. **Pleospora Chuquiragæ** Speg., An. Mus. Nac. Buenos Aires t. XIX 4252

(1909) pag. 390. — Foliis infectis totis arescentibus v. pro parte pallide cinerescentibus; peritheciis laxè gregariis coriaccellis innato-erumpentibus subhemisphaericis 120-150 μ . diam., non v. vix papillulato-ostiolatis; ascis cylindraceis breviter pedicellatis 80-90 \times

20, parcissime paraphysatis, octosporis; sporidiis eximie polymorphis plerumque subellipsoideis 1 3-5 transverse septatis, septo long. nullo v. uno, ad septum medium præcipue constrictulis, 24-25 \times 11-12, mox intense olivaceis fere opacis.

Hab. ad folia arida Chuquiragæ hystericis, secus Rio Santa Cruz, Rep. Argentina Amer. aust.

36. *Pleospora putrefaciens* Frank, Krankheit. der Pflanz. II (1896) 4253

p. 299-300, c. f. 1, Prillieux Malad. plant. agric. II, p. 245, f. 339. — Peritheciis initio tectis, demum epidermide secedente liberis; ascis oblongo-clavatis, octosporis, subsessilibus; sporidiis inæqualiter monostichis, ellipsoideo-oblongis, utrinque rotundatis, 7-septatis crebreque muriformibus, 28 \times 9, brunneis, loculis guttulatis.

Hab. in foliis languidis v. jam emortuis Betæ vulgaris in Germania. — In fungilli evolutione præcedit stat. conidioph. (*Clasterosporium putrefaciens* (Fuck.) Sacc. Syll. IV, p. 393) qui Betæ plantas valde vexat et forte necat.

37. *Pleospora Halimi* Maubl., Bull. Soc. Myc. Fr. (1905) p. 89, t. VI, 4254

f. 6. — Peritheciis gregariis, primo tectis, demum superficialibus, depresso-conoideis, uigris, 0,2-0,3 mm. diam.; ascis clavatis, subsessilibus, crasse tunicatis, 80-100 \times 18-24, rarius cylindræis, 150 \times 16, octosporis filiformi-paraphysatis; sporidiis irregulariter distichis v. in asco cylindrico monostichis, oblongo-ovoideis, primo 3-septatis muriformibusque, melleo-fuscis, 20-26 \times 10-12,5.

Hab. in ramulis Atriplicis Halimi, Pornic Galliæ. — Verisimiliter *Camarosporium Halimi*, quocum species crescit, est st. pycnidicus.

38. *Pleospora Salicorniæ* Jaap, Abh. Bot. Ver. Prov. Brandenb. II. 4255

(1907) p. 16. — Peritheciis sparsis, tectis, dein liberis, globosis, 250-350 μ . diam., parietibus 5-6 μ . cr. (?) et ostiolo brevi conoideo præditis; ascis late clavatis, dein clavato-cylindræis, 135 \times 21, pedicello brevi 8-10 μ . longo præditis, maturis usque ad 200-300 μ . long., octosporis; sporidiis plerumque oblique distichis v. in ascis elongatis recte monostichis, flavo-melleis, ovoideo-elongatis, apice plerumque late rotundatis, 24-28 \times 12-13, transverse 7-septatis, longitudinaliter 1 2, medio distincte constrictis; paraphysibus filiformibus, hyalinis, 3 μ . cr., septatis, multiguttulatis.

Hab. in caulibus vetustis Salicorniæ herbacæ pr. Morsum in Ins. Sylt, Schleswig-Holst. Germania. — *Pl. Salsolæ* Fuck. affinis. Socia adest *Diplodina Salicorniæ* Jaap, n. sp.

39. *Pleospora aurea* Ell. et Ever. North Amer. Pyr. (1892) p. 340, 4256

t. XXVIII, f. 14-17, Mac Alp. Fung. Stone fruit Austr. t. XXII, fig. 53-55. — Peritheciis gregariis, epidermide tectis, 250-300 μ . diam., mox collapsis; contextu crasse parenchymatico præditis, basi mycelio repente, septato, parce ramoso cinctis; ascis amplis, obtusis, sessilibus, 75-114 \approx 25; sporidiis distichis, ellipsoideis, applanatis, 4-septatis, aureis, 22-25 \approx 12-14 e latere 10-11 μ . cr., loculis mediis ternis septo longit. divis.

Hab. in caulibus herbaceis, Utah Amer. bor. (HARKNESS).

40. **Pleospora Fagi** Lind, Ann. Mycol. V (1907) p. 274, cum icon. 4257 — Maculis epiphyllis orbicularibus, 2-3 mm. diam., pallescentibus, late nigro-marginatis; peritheciis epidermide tectis, sparsis, globosis, vix 200 μ . diam., levibus, prominentibus; ascis ellipsoideo-clavulatis, sessilibus, octosporis, 82-92 \approx 20; paraphysibus numerosis, filiformibus, septatis, hyalinis, obtusis, apice circa 3 μ . cr.; sporidiis distichis, oblongo-ovoideis, rectis, utrinque late rotundatis, 5-septatis, loculis mediis septo longitudinali præditis, non constrictis, flavis, 24-30 \approx 9-10.

Hab. in foliis siccis Fagi silvaticæ prope Wiborg in Jütland, Dania.

41. **Pleospora mollis** Starb., Ascom. Schwed. Chaco-Cordill. Exp., 4258 Arkiv f. Bot. Bd. V (1905) p. 24, fig. 21. — Peritheciis immersis, per rimas peridermii gregatim sæpissime in series longitudinales ordinatis erumpentibus, sphæroideis vel mutua pressione difformibus, fere astomis, denique vertice ore minuto perforatis, rugosiusculis, interdum minute plicatulis, reliquiis matricis dispersis, contextu mollissimo, parenchymatico, 125-150 μ . d.; ascis octosporis, ellipsoideo-ovatis, sursum rotundatis et incrassatis, sessilibus 56-63 \approx 25-30, interdum cylindræo-clavatis, c. 100 \approx 19, noduloso-pedicellatis; sporidiis plerumque conglobatis, ellipsoideo-oblongatis, inæqualateralibus, interdum fere soleæformibus, triseptatis, medio constrictis, parte supra septum medium latiore, uno alterove loculo sepimento longitudinali vel obliquo partito, loculis sæpe guttulatis, flavis, denique fuliginis, 21,5-25,5 \approx 9; paraphysibus vix ullis.

Hab. in ramulis aridis Ephedræ americanæ, Prov. Jujuy, Moreno Argentina. — A *P. Ephedræ* Fabr. et homonyma *P. Ephedræ* Speg. diversissima; textura autem et peritheciis aggregatis *Cucurbitariæ Ephedræ* Tassi affinis est, a qua species nostra, facile *Cucurbitariæ* adscribenda, peritheciis multo minoribus et forma ascorum dignoscitur.

42. *Pleospora oblongispora* Rehm, Ann. Mycol. V (1907) p. 542. — 4259

Peritheciis gregariis, innatis, globulosis, papillula minutissima prominente demum prorumpentibus, glabris, nigro-fusculis, contextu parenchymatico, 180-200 μ . diam.; ascis clavatis, subsessilibus, 70 \times 12, 8-sporis; sporidiis oblongis, rectis, utrinque valde rotundatis, transverse 5-septatis, cellulis singularibus 2-3 semel longitudinaliter divis, flavis, 15-18 \times 6-7, distichis; paraphysibus septatis, fere articulatis.

Hab. ad ramulos Laricis deciduæ, Meiringen Helvetiæ (JAAP). — A *Pleospora laricina* Rehm et *P. obducente* f. *Laricis* Sacc. penitus diversa.

43. *Pleospora Hyacinthi* Sorauer, Pflanzk. II (1886) p. 340, t. 14, f. 10. — 4260

17. — Peritheciis gregariis globoso-lenticularibus, poro pertusis, ex mycelii hyphis brunneis copiosis ramosis orientibus, initio epidermide velatis, 330 μ . lat., 200-275 μ . alt., nigris; ascis articulato-paraphysatis, clavatis, subsessilibus, apice rotundatis, 200 \times 35, octosporis; sporidiis distichis, ellipsoideis, utrinque rotundatis, sursum crassioribus, 7-8-septatis denseque muriformibus, non v. vix constrictis, 26-37 \times 15-17, brunneis.

Hab. in foliis, quæ nigrescunt, Hyacinthi orientalis in Germania. — Species valde noxia.

44. *Pleospora pulchra* Kirschst., Verh. Bot. Ver. Brandenb. XLVIII 4261

(1906) p. 57. — Peritheciis in maculis rubidis insidentibus, sparsis, nigris, globosis, membranaceis, immersis, sed ostiolo brevi cylindraceo prominulis, 250 μ . circ. diam.; ascis cylindraceis, subsessilibus, supra rotundatis, octosporis, 130-180 \times 26-33; sporidiis distichis, ovoideis, medio constrictis, transverse 11-14-longitudinaliter 2-septatis, flavis, dein brunneis, 30-40 \times 10-12; paraphysibus numerosis, filiformibus.

Hab. in culmis putrescentibus Typhæ latifoliæ, Igelpfuhl prope Gross-Behnitz Germaniæ.

45. *Pleospora Lapageriæ* Speg., Fungi Chilenses (1910) pag. 93. — 4262

Maculis nullis; peritheciis amphigenis, parenchymate innatis, epidermide tectis, atris, minutis, glabris, poro pertusis, 250 μ . diam.; ascis e cylindraceo subclavulatis, aparaphysatis, octosporis, breviter pedicellatis, 180-200 \times 28-30; sporidiis ellipsoideo-subobovatis, transverse 7-septatis, ad septum medium leniter constrictulis, septis 1 v. 2 longitudinalibus divis, primo luteis tunica mucosa vestitis, serius fuliginis nudis, 30-42 \times 16-18.

Hab. in foliis emortuis et putrescentibus Lapageriæ roseæ

in silvis prope Cerro Caracol de Concepcion Chile Amer. austr. — Sporidiis nonnullis videntur lateraliter compressis ideoque illis gen. *Clathrospora* similibus.

46. **Pleospora Puyæ** Speg., Fungi Chilenses (1910) p. 85, cum icon. 4263
Peritheciis laxè gregariis parenchymate immersis, epidermide velatis, subglobosis, coriacellis, 200 μ . diam.; ascis cylindræis paraphysatis, brevissime pedicellatis, 100-120 \times 14; sporidiis oblique monostichis ellipsoideis sæpius 3-septatis, ad septum medium constrictis, loculis centralibus longitudinaliter, rarius etiam transverse divisus, 18-20 \times 8-9.

Hab. in foliis putrescentibus Puyæ cæruleæ, Cerro S. Cristobal de Santjago Chile Amer. austr. — *Pl. Thumenianæ* Sacc. affinis a qua differt paraphysibus nullis.

47. **Pleospora proteosperma** Speg., Fungi Chilenses (1910) pag. 90 4264
(sub *proteispora*) et p. 199 (Errata-Corrige) cum icon. — Peritheciis sparsis v. laxè gregariis parenchymate plus minusve immersis, epidermide semper tectis, subconoideis, atris coriacellis, centro collabescentibus, 250 μ . diam.; ascis cylindræis v. saccatis, subparaphysatis, 2-4-6-8-sporis, 80-140 \times 20-28; sporidiis sæpe in eodem asco variabilibus sæpius obovatis subdidymis, septis transversis 1, 3, 5, 7, loculis 0, 1, 2 v. omnibus septis longitudinalibus 1 v. 2 divisus, primo luteis serius fusco-flavescentibus, nudis vel tunica mucosa vestitis, 20-22 \times 8-10, 28-30 \times 11-12, 35-40 \times 14-18.

Hab. in foliis emortuis putrescentibus Puyæ chilensis Cerro Alegre de Valparaiso Chile Amer. austr.

48. **Pleospora præandina** Speg., An. Mus. Nac. Buenos Aires t. XIX 4265
(1909) p. 392. — Maculis nullis sed matrice tota sordide cinereo-arescenti; peritheciis hinc inde laxè gregariis epidermide velatis ostiolo valide papillato erumpentibus, 200-250 μ . diam.; ascis subcylindræis pedicello brevissimo crasso suffultis, 85-90 \times 16 20, paraphysibus filiformibus parvis obvallatis, octosporis; sporidiis elliptico-didymis, transverse 7- longitudinaliter 1-2-septatis, 22-25 \times 10-11, primo fuliginosis serius atris opacis.

Hab. ad folia arida putrescentia Dyckia ejusdam in præandinis Cacheuta prope Mendoza Rep. Argentina Amer. austr.

49. **Pleospora gigaspora** Karst. — Syll. IX, p. 890 — var. **meridiana** 4266
Roll. Bull. Soc. Myc. Fr. (1905) p. 25. — Peritheciis sphaeroideis, 300-400 μ . diam., ostiolo obtuso emergente; ascis 200-300 \times 50-60, octosporis; sporidiis 8-10-septato-muriformibus, 60-74 \times 24-26, fusco-olivaceis, circulo hyalino tenuissimo obvolutis.

Hab. in foliis languidis *Asphodeli macrocarpi*, Sa Font de S'Olla et Sa Coma in insulis Balearibus.

50. *Pleospora mauritanica* Maire, Bull. Soc. Bot. Fr. LIII (1906 4267 ed. 1907) pag. CXCII. — Peritheciis immersis, dein epidermide delapsa nudatis, rotundatis, nigris, apice ostiolo epapillato pertusis; ascis cylindraceis, octosporis, subsessilibus, circ. 40-150 \times 40; sporidiis distichis, flavo-brunneis, majusculis, ellipsoideis, utrinque rotundatis, levibus, transverse 7-9-septatis, longitudinaliter 2-4-seriatim septatis. 45-52 \times 16-21, rarius usque ad 60 \times 26.

Hab. in caulibus aridis *Asphodeli cerasiferi*, in silvis inter Tlemcen et Hafir Africae bor. — A *Pl. Asphodeli* sporidiis majoribus, magis septatis, obscurioribus diversa.

51. *Pleospora mallorquina* Roll. Bull. Soc. Mycol. Fr. (1905) p. 26, t. I, 4263 f. 4. — Peritheciis globoso-depressis, 0,5 mm. diam., epidermide velatis, subseriatis, papilla vix visibili emergente; contextu parenchymatico; ascis ovoideis vel cylindraceis, crassis, 120-207 \times 50, octosporis, breviter subgloboso-stipitatis, filiformi-paraphysatis; sporidiis 2-3-stichis, primo subfusoides, dein ovoideis, melleis, initio 3-septatis, septisque 1-2 longitudinalibus partitis, demum octoseptato-muriformibus, soleiformibus, 52-54 \times 20.

Hab. in caulibus *Urgineae Scillae*, Como Negra in insul. Balearibus. — *Pleosporae Saccardoi* affinis.

52. *Pleospora Alstroemeriae* Speg., Fungi Chilenses (1910) p. 90. — 4269 Peritheciis sparsis v. laxe gregariis matrice infuscata insidentibus, primo epidermide tectis, sublenticularibus, minute papillato-ostiolaris, coriacellis, 150-200 μ . diam.; ascis cylindraceis v. subsaccatis, subsessilibus non v. parce paraphysatis, octosporis; sporidiis in eodem asco saepius dimorphis, alteris subclavulato-didymis 3-septatis, loculo unico longitudinaliter diviso 24-26 \times 12-14, alteris paullo majoribus 28-30 \times 14-16, subellipsoideis transverse 7-septatis constrictulis, oculis pluribus septis 1 v. 2 longitudinalibus interruptis divisis, omnibus plus minusve lutescentibus.

Hab. in scapis floralibus siccis *Alstroemeriae*, Cerro Alegre de Valparaiso Chile Amer. austr. — *Pl. herbarum* affinis.

53. *Pleospora Orchidearum* P. Henn., Hedw. XLIV (1905) p. 170. 4270 — Peritheciis cauliculis erumpenti-superficialibus, sparsis v. subgregariis, subglobosis, saepe vertice depressis, perforatis, subcoriaceis, atris, 180-200 μ . diam.; ascis clavatis apice rotundatis, tunicatis, basi curvulis attenuatis, 8-sporis, 100-150 \times 18-30; sporidiis subdistichis, oblonge fusoides vel subellipsoideis, utrinque obtu-

siusculis, flavis dein brunneis, 7-septatis, muralii-divisis, 25-38 \times 10-16.

Hab. in caulibus Phaji Wallichii in calidariis horti botanici Berolinensis.

54. *Pleospora Neottiae* Hollós, Ann. Mus. Nat. Hungar. VIII (1910) 4271 p. 10. — Peritheciis sparsis, tectis, depresso-globosis, glabris, fuscis, ostiolis minutis, 190-210 μ . diam., contextu celluloso; ascis clavatis, 72-84 \times 14-18, octosporis, filiformi-paraphysatis; sporidiis distichis, ellipsoideis, transverse 3-septatis, ad septa valde constrictis, loculis mediis in longitudine 1-septatis, luteis, 20-24 \times 8-10.

Hab. in foliis siccis Neottiae nidi-avis prope Kecskemét Hungariæ.

55. *Pleospora Arundinis* Giuditta Mariani, in Atti Soc. ital. Sc. nat. 4272 L (1911) p. 166, fig. 3. — Peritheciis densiuscule sparsis, foliorum parenchymate immersis, per epidermidem erumpentibus, subgloboso-depressis, atris, distincte ostiolatis, 250-350 μ . diam., contextu minute pseudoparenchymatico, fuligineo-umbrino; ascis late oblongis, subsessilibus, crasse tunicatis, 110-180 \times 24-28, octosporis; sporidiis irregulariter subdistichis, ellipsoideo-oblongis, medio aliquantulum constrictis, transverse 7-septatis septisque longitudinalibus 1-3 seriatis regulariter divisis, 27-30 \times 12-14, luteo-brunneis.

Hab. in foliis languidis Arundinis Donacis, prope Coimbra Lusitaniæ (A. MOLLER). — *Pleosporæ herbarum* certe affinis, sed, ut videtur, sporidiis minoribus distincta.

56. *Pleospora Phragmitis* Hollós, Ann. Mus. Nat. Hungar. VIII 4273 (1910) p. 10. — Peritheciis epidermide tectis, seriatim dispositis, atris, breve papillatis, ellipsoideis, 700 \times 300, contextu celluloso; ascis clavatis, breve stipitatis, octosporis, 130-160 \times 20-24; paraphysibus filiformibus, septatis; sporidiis distichis, oblongo-fusoideis, rectis v. curvulis, 9-septatis, septisque uniseriatis longitrorsum divisis, ad septa leniter constrictis, melleis, demum umbrinis, 44-50 \times 10-12.

Hab. in culmis putridis Phragmitis communis prope Kecskemét Hungariæ.

57. *Pleospora Gaussiana* P. Henn., Deutsche Südpolar-Exped. Bd. 4274 VIII (1906) Extr. p. 12. — Peritheciis sparsis innato-suberumpentibus, subglobosis, obtuse papillatis, atro-membranaceis, c. 120-140 μ .; ascis clavatis, obtuso-rotundatis, octosporis, 83-105 \times 10-12; paraphysibus filiformibus, septatis, hyalinis, c. 2 μ . cr.; spo-

ridiis subdistichis, oblongo-ellipsoideis v. clavatis, obtusis, 5-raro 6-septatis, murali-divisis, constrictis, 23-30 \approx 8-11, atro-fuscis.

Hab. in foliis siccis Festuæ antarcticæ, Kerguelen-Station (E. WERTH). — A *Pl. Forsteri* Speg. peritheciis multo minoribus, ascis sporidiisque majoribus diversa.

58. **Pleospora culmicola** Speg., Fungi Chilenses (1910) p. 89. — Pe- 4275
ritheciis erumpenti-superficialibus laxè gregariis hemisphaerico-conoideis, valide papillato-ostiolatis, atris glabris coriaccellis, 250-300 μ . diam.; ascis cylindræeo-saccatis, breviter pedicellatis, paraphysatis, 150 \approx 22-28; sporidiis ellipsoideo-subbiconoideis medio-cribus e luteo fuscis, transverse 7-septatis, septo altero longitudinali continuo divisis, 30-36 \approx 12-14.

Hab. in culmis Graminacæ ejusdam (? Paspali), Cerro Caracol de Concepcion Chile America austr.

59. **Pleospora Drygalskiana** P. Henn. Deutsche Südpolar-Exped. Bd. 4276
VIII (1906) Extr. p. 12, tab. II, fig. 13 *a-b*. — Peritheciis sparsis, epidermide nigrefacta tectis, dein ostiolo erumpentibus, subglobosis v. ovoideis, atro-membranaceis, c. 150 μ . diam.; ascis clavatis, apice tunicatis, rotundatis, 8-sporis, 70-100 \approx 15-22; paraphysibus filiformibus septatis, hyalinis, 2 μ . cr.; sporidiis subdistichis, fusoides, obtusis v. subacutiusculis, 4-septatis, interrupte murali-divisis, melleis dein atris, 18-24 \approx 6-11.

Hab. in foliis emortuis Agrostidis antarcticæ, Kerguelen (E. WERTH). — A *Pl. antarctica* Speg. ascis sporidiisque latioribus, sporidiis nigro-brunneis 4-septatis diversa.

60. **Pleospora Werthiana** P. Henn., Deutsche Südpolar-Exped. Bd. 4277
VIII (1906) Extr. pag. 12, tab. II, fig. 12 *a-b*. — Peritheciis epiphyllis sparse gregariis epidermide tectis, dein ostiolo erumpentibus, lenticulari-globosis, atris, membranaceis, c. 150-170 μ . diam.; ascis clavatis, apice rotundatis, tunicatis, octosporis, 85-110 \approx 20-23, paraphysibus filiformibus hyalinis; sporidiis subdistichis, oblongis v. clavatis, obtusis, 3-5-septatis, muraliter divisis, 18-25 \approx 10-14, primo flavis dein brunneis.

Hab. in foliis Poæ Cookii, Kerguelen (E. WERTH).

61. **Pleospora Vanhöffenii** P. Henn., Deutsche Südpolar-Exped. Bd. 4278
VIII (1906) Extr. p. 12, t. II, f. 11, *a-b*. — Peritheciis amphigenis sparsis v. gregariis, primo epidermide tectis dein suberumpentibus, subglobosis, pertusis, atro-fuscis, membranaceis, 200-250 μ . diam.; ascis late clavatis apice tunicatis, rotundatis, basi substipitatis, curvatis, octosporis, 90-120 \approx 33-42; paraphysibus filiformi-

bus, hyalinis, c. 2-3 μ . cr.; sporidiis subdistichis oblongis v. sub-fusoides, apice rotundato-obtusis, interdum acutiusculis, 7-9-septatis, muriformibus, cellulis angulatis, primo melleis dein fusco-brunneis, 32-40 \times 11-14.

Hab. in foliis Poæ Cookii, Kerguelen Vanhöffen Insel (E. VANHÖFFEN).

62. *Pleospora Equiseti* A. L. Smith, Trans. Brit. Mycol. Soc. 1908, 4279 v. III (1909) p. 116, tab. VI, fig. 5 *a-b-c*. — Peritheciis minutis, nigro-brunneis, maculis minutis nigrantibus insidentibus, subglobosis, subepidermicis, non emergentibus, poro apertis, 200-270 μ . diam.; ascis clavatis, brevissime pedicellatis 90 \times 12; sporidiis brunneo-flavis, 5-septatis, cellulis mediis longitudinaliter septatis, 25-27 \times 6-8.

Hab. in caulibus emortuis *Equiseti*, Kilwinning Ayrshire Britannia (D. A. BOYD).

63. *Pleospora Mycenastri* Hollós, Ann. Mus. Nat. Hung. IV (1906) 4280 p. 533. — Peritheciis gregariis, erumpentibus, depresso-globosis, fuscis, poro pertusis, 100-140 μ . diam., contextu parenchymatico; ascis clavatis, apice tunica crassa integra rotundatis, estipitatis, 8-sporis, 54-74 \times 40-50; sporidiis inordinate 2-3-stichis, oblongo-ellipsoideis, 3-septatis, non constrictis, loculo 1-2 longitudinaliter divisus, hyalinis, demum fuscescentibus, 26-32 \times 10-12.

Hab. in endoperidio *Mycenastri* Corii prope Kecskemét, Hungariæ.

64. *Pleospora Secotii* Hollós, Annal. Mus. Nat. Hung. IV (1906) 4281 pag. 533. — Peritheciis dense gregariis erumpentibus, depresso-globosis, fuscis, poro pertusis, 100-140 μ . diam., contextu parenchymatico; ascis clavatis, apice tunica crassa integra rotundatis, estipitatis, octosporis, 60-70 \times 26-36; sporidiis inordinate 2-3-stichis, oblongo-ellipsoideis, 3- raro 4-septatis, ad septum medium validius constrictulis, loculo 1- interdum 2-longitudinaliter divisus, loculis pluriguttulatis, diu hyalinis, demum fuscescentibus, 30-36 \times 14.

Hab. in endoperidio *Secotii* agaricoidis, prope Kecskemét Hungariæ. — An a præcedente satis distincta?

65. *Pleospora Montagnitis* Hollós, Ann. Mus. Nat. Hung. IV (1906) 4282 pag. 532. — Peritheciis sparsis, depresso-ellipsoideis, nigris, poro pertusis, 120-250 \times 100-180, contextu parenchymatico; ascis cylindraceis, breviter stipitatis, 4-6-8-sporis, 70-90 \times 12-14; sporidiis monostichis, oblongis, 3-septatis, ad septum medium validius con-

strictulis, loculis duobus intermediis longitudinaliter divis. plurumque muriformi-septatis. flavis, dein brunneis, 18-22 \times 8-9.

Hab. in receptaculo Montagnitis radiosi (= M. Candollei) prope Izsák, Hungariæ.

CLATHROSPORA Rabenh. — Syll. IX p. 894, XVI p. 548.

1. *Clathrospora constricta* R. Maire, Champ. Asie Min., Bull. Soc. 4288 Sc. Nancy (1906) Extr. pag. 10, fig. 1. — Peritheciis sparsis v. aggregatis, erumpentibus, globoso-depressis, 280-400 μ . diam., levibus, nigris, ostiolo papillato; ascis oblongo-clavatis, rectis vel curvulis, subsessilibus v. breve pedicellatis, 3-8-sporis, paraphysibus filiformibus mox liquescentibus obvallatis; ascis octosporis 95-120 \times 28-34, tetrasporis 85-105 \times 28-31; sporidiis distichis, levibus, brunneis, ellipsoideo-complanatis, sursum plerumque rotundatis v. obtusis, deorsum sæpe plus minusve acutatis, transverse 3-septatis (loculis mediis septo longitudinali divis), ad septa constrictis, 29-37 \times 16-19 \times 11-13.

Hab. in caulibus aridis Gypsophilæ olympicæ in zona alpina Olympi Bithynici, Anatolia.

2. *Clathrospora* ? *punctiformis* (Niessl) Berl. — Syll. II, p. 271 (*Pleo-4284 spora*) — var. *alpina* Rehm, Oesterr. bot. Ztschr. LVI (1906) p. 297. — Nomen nudum.

Hab. in caulibus siccis Junci Hostii, Alpeiner-Alpe Stubai Austria.

3. *Clathrospora tirolensis* Rehm, Oesterr. bot. Ztschr. LVI (1906) 4285 p. 297. — Nomen nudum.

Hab. in culmis Graminacearum, Konstanzer Hütte Arlberg Austria.

4. *Clathrospora Stipæ* Trav. in Bull. Soc. Flore Valdôtaine, VIII 4286 (1912). — Peritheciis sparsis vel seriatis, parenchymate immersis eoque arcte adhærentibus, epidermide pustulatim elevatula diu omnino tectis, demum vix erumpentibus, globoso-depressis, 250-300 \times 150-200, atris, glabris, excipulo minute et irregulariter pseudoparenchymatico, fuligineo-atro, ostiolo papillulato, poro latiusculo pertuso; ascis obovoideo-clavatis v. oblongis, sessilibus, apice late rotundatis ibique tunica vix incrassata, 110-120 \times 30-36, paraphysibus filiformibus ascos subæquantibus, ad 3 μ . crassis obvallatis; sporidiis irregulariter 2-3-sticho-confertis, e fronte visis ellipsoideis, 36-40 \times 18-19, e latere subfusoides, 36-40 \times 10-12, septis

transversis 7-9, longitudinalibus 3, ad septa singula vix constrictis, flavo-lutescentibus.

Hab. in foliis siccis *Stipæ pennatæ* supra Berio, alt. 1700 m. (Valpelline, Valle d'Aosta, Ital. bor.). — Affinis *Cl. Elynæ*, in *Cyperaceis*, a qua satis differt ascis et sporidiis minoribus. Forma depressa sporidiorum in ipso asco plerumque eximie manifesta.

PYRENOPHORA Fr. — Syll. II 277, IX p. 895, XI p. 344, XIV p. 602, XVI p. 549, XVII p. 757.

1. *Pyrenophora pachyasca* Syd., Ann. Mycol. VI (1908) p. 529. — 4287
Peritheciis sparsis, subglobosis, atris, minutis, 150-225 μ . diam., epidermide diu tectis, submembranaceis, superne setis fuliginis rigidis fragilibus septatis, apicem versus dilutioribus, usque ad 250 μ . longis obsitis, ostiolo minuto; ascis variabilibus, saccatis et subsessilibus usque cylindraceis et stipite usque ad 35 μ . longo suffultis, octosporis, 100-130(-175) \approx 45-60; sporidiis irregulariter distichis, ovato-oblongis, utrinque rotundatis, longitudinaliter plerumque 7-septatis, verticaliter, 2-4-septatis, medio constrictis, obscure olivaceo-brunneis et subopacis, 35-52 \approx 20-25

Hab. in foliis *Astragali Raswendi* in montibus Tefresch Persiæ occ. (Th. STRAUSS). — *P. Androsaces* (Fuck.) Sacc. affinis, ab ea differt setulis longioribus, sporidiis medio constrictis.

2. *Pyrenophora* ? *ambigua* Berl. et Bres. — Syll. IX, pag. 896 — 4288
var. *sexseptata* Rehm, Oest. Bot. Ztschr. LVI (1906) p. 297. — Nomen nudum.

Hab. in caulibus *Cerastii*, Alpeiner-Alpe Stubai Austria.

3. *Pyrenophora ampla* Syd., Ann. Mycol. IV (1906) p. 343. — Pe. 4289
Peritheciis sparsis, subcutaneis, tandem erumpentibus, globoso-depressis, ca. 175-220 μ . diam., ostiolo minuto, primo setulis simplicibus erectis rigidis septulatis opacis apice non dilutioribus ca. 175 μ . longis, 7 μ . latis obsessis, tandem calvescentibus, membranaceo-coriaceis, atris; ascis amplis, late ellipsoideis, brevissime stipitatis, 140-180 \approx 50-65, octosporis; sporidiis irregulariter distichis, oblongis, utrinque rotundatis, rectis vel leniter curvulis, transverse 10-14-septatis, longitudinaliter 2-3-septatis, ad septa constrictis, olivaceo-brunneis, tandem obscurioribus et subopacis, 52-72 \approx 21-28.

Hab. in foliis petiolisque emortuis *Anemones tetonensis*, Big Cottonwood Canyon, Salt Lake Co., Utah Americæ bor. (A. O. GARRETT).

4. *Pyrenophora Astragalorum* R. Maire, Champ. Asie Min., Bull. Soc. 4290

Sc. Nancy (1906) Extr. p. 9. — Peritheciis sparsis, primo tectis dein erumpentibus, subglobosis, apice setis rigidis, longiusculis, acutis, levibus, fuliginis, divergentibus ornatis. 200-300 μ . diam.; ascis cylindræis v. clavatis, 80-130 \times 26-36, paraphysatis, 2-8-sporis; sporidiis distichis oblongis 34-50 \times 14-26 rarius usque ad 80 \times 28, flavo-brunneis, dein fuliginis, levibus, dense muralibus, transverse 7-9-septatis, longitudinaliter 3-septatis, ad septa omnia æqualiter constrictis.

Hab. in rachidibus putrescentibus foliorum Astragali sp., in M. Olympo Bithyniæ, Astragali gummiferi, in M. Argæo Anatoliæ.

5. **Pyrenophora Amphoricarpi** Bubák, Bull. Herb. Boiss. 2. sér. VI 4291 (1906) p. 402. — Peritheciis subæqualiter distributis, basi immersis, globosis v. supra leniter conoideo-productis, 170-190 μ . cr., nigris, parietibus 20-30 μ . cr., apice setulis subæspitosis, nigris, septatis, rectis, 200-300 \times 4-5, præditis; contextu parenchymatico, extus nigro intus albido; ascis 100-130 \times 40-50, supra rotundatis ibique 5-9 μ . incrassatis, basi breviter pedicellatis, hyalinis, octosporis; sporidiis ovoideo-elongatis, 35-55 \times 15-20, transverse 7-9-septatis, septo medio fortiter constrictis, utrinque rotundatis, castaneo-brunneis, in asco irregulariter positos, loculo superiori plerumque majori.

Hab. in foliis siccis Amphoricarpi Neumayeri M. Lovcen prope Njegos, M. Zeletin et M. Gradiste Montenegro.

6. **Pyrenophora Tetraneuris** Earle, Bull. of the New York Bot. Gard. 4292 (1904) p. 294. — Peritheciis sparsis, infossis, dein erumpentibus, obscure brunneis, non collabescentibus, circ. 200 μ . diam., ostiolo breviter papillato, setulis brunneis circumdato; ascis subcylindræis, circ. 175 \times 35; paraphysibus filiformibus; sporidiis distichis, brunneis, ellipsoideis, obtusis, 7-septatis, non constrictis quoque loculo 1-3 septis longitudinalibus diviso, circ. 40 \times 18.

Hab. in foliis emortuis Tetraneuris sp., King's Cañon pr. Corson Nevada Amer. bo. (C. F. BAKER).

7. **Pyrenophora Brizæ** C. Mass. in Sacc., Ann. Mycol. (1911) p. 250. 4293 — Peritheciis erumpentibus laxè disseminatis, subcarbonaceis, globosis v. ovoideis 260-300 μ . diam., superne setulis rigidis extremitate pallidioribus, septatis, 200-220 \times 6-10 coronatis; ascis breviter stipitatis, cylindræo-clavulatis, varie curvulis, 140-180 \times 32-40; paraphysibus filiformibus cito collabefactis; sporidiis octonis pallide flavis, melleis, oblongis, utrinque rotundato-obtusis, 3-septatis, lo-

culis duobus mediis v. superiore tantum longitudinaliter 1-septatis, 26-32 \times 10-14.

Hab. in foliis emortuis Brizæ mediæ in M. Baldo loco Val Fredda, Ital. bor. (prof. A. GOIRAN). — *Pyrenophoræ relicinæ* valde affinis sed characteribus sporidiorum, ut videtur, satis diversa.

8. *Pyrenophora filicina* J. Lind, Micromycetes from North-East Grœnlandia, Kiöbenhavn (1910) pag. 157, tab. X, fig. 4. — Peritheciis sparsis, erumpenti-superficialibus, globosis, majusculis, 300 μ . diam., atris, coriaceis, superne setigeris, ostiolo brevi conico; ascis oblongo-clavatis, stipite brevi, apice rotundatis et crasse tunicatis, 8-sporis, 88-110 \times 25; ascis paraphysibusque mox liquescentibus; sporidiis subdistichis, oblongo-ovatis, retis, transverse 5-6-septatis, medio constrictis, in longitudine 1-2-septatis, primo flavis demum fuscis et totis opacis, 28-34 \times 15-17.

Hab. in petiolis emortuis Cystopteridis fragilis, Danmarks Havn Grœnlandia.

PLEOMASSARIA Speg. — Syll. II p. 239, IX p. 872, XI p. 341, XVI p. 552, XVII p. 759.

1. *Pleomassaria Vandasii* Bubák, Ann. Mycol. IV (1906) p. 110. — Peritheciis subepidermicis, collo brevi papilliformi prominulis, globosis, subdepressis 300-400 μ . diam., nigris, parietibus nigricantibus, parenchymaticis, compactis, 45-70 μ . cr.; ascis elongatis vel elongato cylindræis, stipitatis, supra rotundatis, 100-120 \times 28-33, crasse tunicatis, hyalinis, paraphysibus tenuibus numerosis incurvatis circumdati, 4-8-sporis; sporidiis ellipsoideis v. elongatis 33-42 μ . long. supra 13-17, 5 μ . basi 11-13 μ . cr., crasse tunicatis transverse 8-10- longitudinaliter 3-septatis, medio constrictulis, e brunneo-melleo obscure brunneis, strato mucoso 2-3 μ . cr. obvolutis.

Hab. in petiolis siccis foliorum Astragali angustifolii, Galicia-planina Macedonia (E. FORMANEK; comm. K. VANDAS).

2. *Pleomassaria Robinæ* Bubák, Ann. Mycol. IV (1906) p. 111. — Peritheciis cortice immersis, solitariis v. aggregatis, plerumque breviter seriatis, apice breviter conoideo-erumpentibus, dein superiori parte prominentibus $\frac{1}{2}$ - $\frac{3}{4}$ mm. diam., subconoideis, 300-400 μ . altis, basi depressis, nigris, parietibus compactis extus flavescens, intus fere nigris usque ad 30 μ . cr.; ascis cylindræis, supra rotundatis basi in petiolum brevem attenuatis, 130-220 \times 22-28, rectis v. curvulis, 4-8-sporis; paraphysibus numerosis incurvatis

multiseptatis obvolutis; sporidiis ex elongato-ellipsoideo elongato-cylindræis $30-65 \times 17-22$, transverse 5-8-longitudinaliter 1-2-septatis, ad septa plus minusve constrictis, flavo-brunneis.

Hab. in ramulis emortuis Robiniæ Pseudoacaciæ, Pátek prope Peruc, Bohemia.

3. *Pleomassaria muriformis* Kirschst., Verh. Bot. Ver. Brandenb. 4297 XLVII (1906) p. 57. — Peritheciis sparsis sub peridermio nidulantibus, prominulis, globosis, nigris, membranaceis, basi hyphis brunneis septatis præditis, $\frac{3}{4}$ mm. circ. diam.; ascis cylindræo-clavatis, breviter pedicellatis, supra rotundatis, octosporis, $180-200 \times 24$; sporidiis oblique monostichis v. irregulariter distichis, ovoideis, flavidis, transverse 12-longitudinaliter 3-4-septatis, medio constrictis, $30-35 \times 14-16$; paraphysibus numerosis, filiformibus, septatis, circ. 2 μ . cr.

Hab. in ramulis dejectis Piri Mali prope Gross-Behnitz Germaniæ.

TEICHOSPORA Fuck. — Syll. II p. 290, IX p. 899, XI p. 345, XIV p. 603, XVI p. 550, XVII p. 760.

1. *Teichospora larreiphila* Speg., An. Mus. Nac. Buenos Aires t. XIX 4298 (1909) p. 395. — Peritheciis sæpius sparsis innato-superficialibus ex hemisphærico conoideis, $200-300 \mu$. diam., levibus, carbonaceis, grosse papillato-ostiolatis; ascis linearibus brevissime coarctato-pedicellatis, $160-200 \times 15-18$, octosporis paraphysatis; sporidiis rectis monostichis late ellipsoideis transverse 5-7-longitudinaliter 1-2-septatis, fuliginæis, ad septa non v. vix constrictulis, ad medium validius, $22-28 \times 12-14$.

Hab. non rara ad latus internum corticis Larreæ cuneatæ viventis in montuosis Cacheuta prope Mendoza Rep. Argentina Amer. austr.

2. *Teichospora cereina* Speg., An. Mus. Nac. Buenos Aires t. XIX 4299 (1909) p. 396. — Peritheciis innato-superficialibus subcarbonaceis subglobosis $90-100 \mu$. diam., basi matrice leniter sordideque confusata inculptis, superne liberis, rotundatis, non papillato-ostiolatis; ascis cylindræis brevissime pedicellatis, 70×10 , paraphysatis, octosporis; sporidiis oblique monostichis ellipsoideis $12-14 \times 8-9$, transverse 3-septato-torulosis, septo verticali unico, fuscis.

Hab. ad lignum denudatum ramorum Cerei Spegazzinii in hortis La Plata Rep. Argentina Amer. austr.

3. *Teichospora ademicola* Speg., An. Mus. Nac. Buenos Aires t. XIX 4300

(1909) p. 393. — Matrice sordide cinerescente, circa perithecia infuscata; peritheciis hinc inde dense pauci-gregariis, ligno denudato insidentibus minute papillato-ostiolatis, hemisphæricis, 200-300 μ . diam., carbonaceis; ascis cylindraceis breviter pedicellatis, 110-120 \times 20-25, dense filiformiter paraphysatis, octosporis; sporidiis elongato-ellipsoideis, constricto-didymis, transverse 5-7 verticaliter 1-septatis, 24-30 \times 10-12, primo lutescentibus dein olivaceis.

Hab. ad ramos emortuos *Adesmiæ* pinifoliæ prope Puente del Inca, Mendoza Rep. Argentina Amer. austr.

4. *Teichospora eucalyptina* Speg., An. Mus. Nac. Buenos Aires t. XIX 4301 (1909) p. 396. — Peritheciis ligno denudato toto sordide infuscato dense gregariis basi insculptis superne liberis hemisphæricis, 150 μ . diam., minute papillulato-ostiolatis, carbonaceis; ascis subfusoides basi crassiuscule pedicellatis, 80-85 \times 16-18, pseudoparaphysatis, octosporis; sporidiis distichis, primo didymis hyalinis cribose guttulatis, serius 5-7-septatis, septo longitudinali solitario v. duplici divis, 20 \times 8-10, plus minnsve obscure fumosis.

Hab. ad truncos cariosos *Eucalypti amygdalinæ* in silva Santa Catalina prope Buenos Aires Rep. Argentina Amer. austr.

5. *Teichospora Montteæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 4302 (1909) p. 397. — Peritheciis in matrice infuscata sparsis subsuperficialibus, subhemisphæricis 120-150 μ . diam., carbonaceis vix papillato-ostiolatis; ascis subcylindraceis breviter pedicellatis, 60-65 \times 14-16, paraphysatis; sporidiis elongato-obovatis didymis, loculo supero 2-septato, loculo infero valde minore 1-septato, septo longitudinali unico, 16-18 \times 6-7, fuligineis.

Hab. ad ramos emortuos *Montteæ* aphyllæ, Chacras de Coria prope Mendoza Rep. Argentina, Amer. austr.

6. *Teichospora upsallatensis* Speg., An. Mus. Nac. Buenos Aires 4303 t. XIX (1909) p. 397. — Peritheciis in ramis denudatis grosse rimoso-fissis sordide cinerescenti-infuscatissimis sparsis v. hinc inde laxè pauci-aggregatis, papillato-ostiolatis, subglobosis 180 μ . diam.; ascis cylindraceis breviter cuneato-pedicellatis 80-100 \times 10-15, dense filiformiter paraphysatis, octosporis; sporidiis oblique monostichis subelongato-ellipsoideis, sæpius 3- raro 5-septato-constictis, olivaceis, 16-20 \times 8-9.

Hab. ad ramos emortuos *Lycii* crassispini circa Upsallata nec non *Larree* nitidæ, Cachenta prope Mendoza Rep. Argentina Amer. austr.

7. *Teichospora Gilliesi* Speg., An. Mus. Nac. Buenos Aires t. XIX 4304

(1909) p. 394. — Matrice tota late sordideque cinerescens; peritheciis sparsis v. hinc inde laxè gregariis, levibus, lenticulari-depressis papillulato-ostiolatis 180-200 μ . diam., atris; ascis subclavulatis crassiuscule tunicatis, breviter crasseque pedicellatis, 120 \approx 15-16, octosporis, dense paraphysatis; sporidiis subellipsoideis oblique distichis rectis v. lenissime inæquilateralibus transverse sæpius 3-septatis, longitudinaliter 1-septatis, 20-25 \approx 9-10, olivaceis.

Hab. ad ramos languidos *Salviæ Gilliesi* in rupestribus Cacheuta prope Mendoza Rep. Argentina Amer. austr. — Species plurimæ *Melanommatum Teichosporarumque* sub 3-septatarum regionis præandinæ inter se summopere affines, perdifficile extricandæ, facile unius speciei polymorphæ formas tantum sistunt.

8. *Teichospora Proustii* Speg., An. Mus. Nac. Buenos Aires t. XIX 4305

(1909) p. 395. — Matrice late sordideque cinerescens; peritheciis subsolitariis ligno denudato insidentibus, superficialibus lenticulari-subhemisphæricis modice papillulato-ostiolatis 400-450 μ . diam., nigris, glabris; ascis linearibus, crassiuscule tunicatis, basi abrupte breviterque cuneato-pedicellatis 150-200 \approx 18-20, 4-6-8-sporis, parce paraphysatis; sporidiis rectis v. oblique monostichis, 40 \approx 17-18, septis transversis 7-9, longitudinaliter 1-3-divisis, e flavescenti fuligineis.

Hab. ad ramos vivos et emortuos *Proustii ilicifoliæ* in præandinis Cacheuta prope Mendoza Rep. Argentina Amer. austr.

9. *Teichospora Suædæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 4306

(1909) p. 397. — Peritheciis ligno denudato reticulato-rimoso insidentibus, densiuscule gregariis sæpius collabescentibus e carnosulo membranaceis subglobosis 200-250 μ . diam., atris; ascis cylindræis brevissime pedicellatis 100-110 \approx 12-14, octosporis, paraphysatis; sporidiis oblique monostichis subobovatis didymis 3-septatis, loculo uno alterove verticaliter diviso, ad septum medium constrictis, fumoso-olivaceis, 18-20 \approx 8-9.

Hab. vulgata ad ramos aridos *Suædæ divaricatæ* in Valle Upsallata prope Mendoza Rep. Argentina Amer. austr.

10. *Teichospora dispersa* (Kirschst.) Sacc. et Trott. *Strickeria di-* 4307

spersa Kirschst., Verh. Bot. Ver. Brandenb. XLVIII (1906) p. 55. — Peritheciis sparsis, nigris, coriacellis, rugulosis, globosis, ostiolo brevi prominenti præditis, primum immersis, demum ligno nudo insidentibus, 300-400 μ . diam.; ascis cylindræis, brevissime pedicellatis, supra rotundatis, octosporis, 100-140 \approx 14-18; sporidiis

oblique mono- v. irregulariter distichis, oblongis, medio parum constrictis, transverse 5-7(plerumque 6)-septatis et longitudinaliter muraliter 2-3-septatis, flavo-melleis, dein obscure brunneis, 20-30 (plerumque 22) \approx 10-12; paraphysibus filiformibus, hyalinis.

Hab. in ligno quercino decorticato in silvis prope Rathe-now Germania.

11. *Teichospora præclara* Rehm, Ann. Mycol. IV (1906) p. 336. — 4308

Peritheciis dispersis, basi cortice subinnatis, demum sessilibus, globulosis, atris, scabriusculis brevissime papillulatis, poro perspicuo haud pertusis, 0,3-0,7 mm. diam. excipulo extus subfusco, intus hyalino, crasso, non carbonaceo; ascis clavatis, apice rotundatis, 250 \approx 30 octosporis; sporidiis fusoides, rectis, primitus hyalinis, dein flavido-fuscis ab initio 3-septatis, interdum medio paullulum constrictis, demum transverse 7-11-septatis, longitudinaliter 2-3-septatis, cellulis guttis oleosis magnis repletis, 60-65 \approx 15-18 distichis; paraphysibus plurimis, arcte juxta positis, filiformibus, septatis, hyalinis.

Hab. ad corticem adhuc pendulum *Ostryæ virginicæ*, Lyndonville U. St. Am. (Dr. FAIRMAN). — *Teichosporæ principii* proxima, differt sporidiis longioribus et crebrius septatis.

12. *Teichospora* ? *andina* Speg., An. Mus. Nac. Buenos Aires t. XIX 4309

(1909) pag. 394. — Maculis nullis; substrato toto arescenti-cinerecente; peritheciis solitariis vel pauci-gregariis erumpentibus subconoideis, carbonaceis 150-180 μ . diam.; ascis cylindraceo-ellipsoideis brevissime pedicellatis 50-60 \approx 20-24, octosporis, aparaphysatis; sporidiis distichis ellipsoideo-elongatis 3-septatis, loculo medio supero sæpius longitudinaliter diviso leniterque tumidiore, oliveis, 22-25 \approx 8-10.

Hab. ad ramulos emortuos *Ephedrae andinæ* in Cerro Pelado circa Mendoza Rep. Argentina Amer. austr. — *Cucurbitarice Ephedrae* Tassi affinis, peritheciorum fabrica, ascis crassioribus brevioribusque aparaphysatis recedens.

13. *Teichospora marina* Roll., Bull. Soc. Mycol. Fr. (1905) p. 27. — 4310

Peritheciis 0,3 mm. diam., globosis, papillatis, atro-nitidis, coriaceis, per fibras ligneas atro-inquinatas erumpentibus; ascis teretibus, apice rotundatis et in stipitem longiusculum basi globoso-tumidulum desinentibus, 120-140 \approx 10-13, filiformi-paraphysatis, octosporis; sporidiis monostichis, ovoideis, crasse 3-septatis, constrictisque, et longitudinaliter hinc inde 1-septatis, guttatis, flavis, 14-17 \approx 6-8.

Hab. in caulibus emortuis Urgineæ Scillæ (vulgo *Ceba marina*), Como Negra in insulis Balearibus. — Var. *Euphorbiæ* Roll., l. c. — A typo imprimis differt ascorum pedicello basi non inflato. — In caulibus emortuis Euphorbiæ dendroidis, Como Negra in insul. Balearibus.

Subgen. *Strickeria* Korb. em. Sacc.

14. *Teichospora larreicola* (Speg.) Sacc. et Trott., *Strickeria larrei* 4311

cola Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 393. — Matrice tota late cinerescens; peritheciis sparsis v. gregariis, udis lenticularibus, siccis eximie cupulato-collabescentibus (50-25) μ . diam., atris, coriaceis; ascis linearibus basi abrupte breviter crasseque pedicellatis 90-110 \times 14-16, octosporis parce paraphysatis; sporidiis oblique monostichis, ellipsoideo-oblongatis transverse 3- longitudinaliter 1-septatis, 18-20 \times 7-8 olivaceo-virescentibus.

Hab. ad ramos cariosos denudatos Larreæ nitidæ in præandinis Cacheuta prope Mendoza Rep. Argentina Amer. austr.

15. *Teichospora variispora* (Kirschst.) Sacc. et Trott. *Strickeria va-* 4312

riispora Kirschst., Verh. bot. Ver. Brandenb. XLVIII (1906) p. 55. — Peritheciis sparsis v. confertis, superficialibus, nigricantibus, obtusis, coriaceis, globoso-depressis, breviter papillato-umbilicatis, 300-400 μ . diam., subsuperficialibus; ascis cylindratis, crasse tunicatis, breviter pedicellatis, supra rotundatis; octosporis, 120-150 \times 11-14; sporidiis oblique monostichis, primum hyalinis, dein brunneolis demumque obscure brunneis, oblongo-fusoideis, medio fortiter constrictis, primum 3- demum usque ad 7-septatis et 1 v. 2 longitudinaliter sed imperfecte septatis, 20-26 \times 9-10; paraphysibus numerosis, filiformibus, hyalinis, ramosis, septatis, quandoque supra globoso-incrassatis.

Hab. in ligno denudato Rhamni Frangulae prope Rathe-now Germaniæ.

16. *Teichospora Mate* (Speg.) Sacc. et Trott., *Strickeria Mate* Speg., 4313

An. Mus. Nac. Buenos Aires t. XVII (1908) p. 127. — Peritheciis subhemisphaericis sparsis v. sæpe subseriatis 150-180 μ . diam. per ætatem sæpe subcollabescentibus vix papillato-ostiolatis, basi leniter matrice infuscata insculptis, non v. vix subiculigeris; ascis cylindratis brevissime pedicellatis, octosporis, 90-100 \times 9-10, paraphysibus filiformibus densis obvallatis; sporidiis elongato-ellipsoideis non v. vix subobovatis, 3-septatis, leniter constrictis, lo-

culis duobus internis quandoque septo longitudinali divisis, olivaceis, 13-19 \times 7-8.

Hab. in superficie interna truncorum cariosorum Illicis paraguariensis (vulgo *Mate*) in silva secus Matto Queimado Rep. Argentinae Amer. austr. — Membrana ascorum Jodi ope leniter carulescit.

17. **Teichospora fodiens** Karst. et Malbr. in Le Breton et Riel in 4314
Bull. Soc. Amis S. N. Rouen (1893) p. 154, t. I, f. 5 (extr.). — Peritheciis confertis v. aggregatis, ligno adnatis corticeque initio velatis, dein eo secedente liberis, sphæroideis v. mutua pressione difformibus, rarius papillatis, dein poro pertusis, non collabescentibus, atris, opacis, levibus, circ. 300 μ . diam.; ascis crasse cylindraceis, brevissime noduloso-stipitatis, octosporis, paraphysatis; sporidiis oblique monostichis, ellipsoideo-oblongis, 3-septatis ad septa levissime constrictis, 18-21 \times 6-6,5, loculo secundo subinde quoque tertio septulo long. diviso, dilute luteolis.

Hab. ad ramulos aridos Salicis sp. pr. Quevilly pr. Rouen Galliae (Reliq. ab. LETENDRE).

18. **Teichospora trabicola** Fuck. — Syll. II, p. 292. — * **T. Notarisii** 4315
Sacc. et Trav. in Saccardo, Not. Myc. VI, Ann. Mycol. III (1905) p. 511. — Peritheciis sparsis v. approximatis e basi adnata superficialibus, globulosis, $\frac{1}{4}$ mm. demum collabescendo leviter concavis, levibus, nigris, carbonaceis, ostiolo minute papillato, perforato; ascis tereti-clavatis, breve crassiuscule stipitatis, octosporis, filiformi-paraphysatis, 50-70 \times 13-14; sporidiis monostichis v. imperfecte distichis, oblongo-ovoideis, utrinque rotundatis, constricto 3-septatis, loculis 1-2 longitrorsum partitis, fusco-olivascensibus.

Hab. in ligno quercino putri, Mediolani Ital. bor. (DE NOTARIS herb. c. icon. in Instituto bot. romano). — A typo differt peritheciis demum collabenti-depressis, sporidiis paullo longioribus, ascis paullo brevioribus et crassioribus.

PLEOSPHERIA Speg. — Syll. II p. 304, IX p. 910, XI p. 347, XIV p. 606, XVII p. 763.

1. **Pleosphaeria silvicola** v. Höhnelt, Fragm. z. Mykol. Sitzb. k. Ak. d. 4316
Wiss. Wien Bd. CXVI, Abt. I (1907) p. 122. — Peritheciis globosis, superficialibus, nigris, tenuiter membranaceo-carbonaceis, sparsis, 200-260 μ . diam., setulis nigris, acutis, rigidis, non v. indistincte septatis 40-70 \times 4 obsitis; paraphysibus paucis; ascis cylindraceis v. clavatis, octosporis, 100 \times 10-16; sporidiis monostichis v. sub-

distichis, ellipsoideis utrinque subangustatis rotundatisque brunneo-olivaceis, transverse 5-8-septatis, 1-2-longitudinaliter sed incomplete septatis, 17-20 \approx 8-9.

Hab. in ligno fagineo putri prope Pressbaum Austriae inf. — *P. quercince* Pat. et *P. pulveraceæ* Mouton affinis.

2. **Pleosphæria Fairmaniana** Saccardo, New Fungi New Y., in Journ. of Myc. XIII (1907) p. 45. — Peritheciis laxè gregariis v. subsparsis, superficialibus, globosis, nigris, membranaceo-carbonaceis, 250-280 μ . diam., vertice rotundatis, non papillatis, utique laxè setulosis; setulis filiformibus, obtusulis, indistincte septulatis, fuligineis, 85-100 \approx 5-6, in fasciculos rigidulos junctis; ascis cylindraceis, octosporis, 100-120 \approx 12, indistincte paraphysatis; sporidiis oblique monostichis, oblongo-ovoideis, sursum crassioribus, 3-septatis (rarius 4-septatis), medio constrictis, parce muriformibus, 19-23 \approx 7,5-9, olivaceo-fuscis.

Hab. in ligno carioso indurato Ulmi americanæ, Lyndonville, New York (C. E. FAIRMAN). — Præcipue *Pleosph. quercince* Pat. boreali-africanæ affinis, a qua differt ascis cylindraceis nec clavatis, setulis peritheci fasciculatis, etc.

3. **Pleosphæria malacoderma** v. Höhnelt, Fragm. z. Mykol., Sitzb. k. Ak. d. Wissensch. Wien Bd. CXVI, Abt. I (1907) pag. 121. — Peritheciis superficialibus, gregariis, globosis, nigris, 140-200 μ . diam., membrana tenuissima, pellucide nigrescenti, fumoso-grisea, parenchymatica, basi hyphis pallide brunneis, septatis, 2 μ . cr. præditis, ceterum setulis nigris, unilocularibus, acutis, 45-60 \approx 2-5; ascis aparaphysatis, parvis, forma variabilibus, plerumque irregulariter clavato-ovoideis, basi stipitiformi angustatis, 55-66 \approx 26-29, octosporis; sporidiis confertis, olivaceis demum griseo-brunneolis, pellucidis, uno latere rotundato-angulosis, altero ovoideis, multilocularibus, 7-9 transverse septatis et nonnullis septis longitudinalibus præditis, 16-18 \approx 10-12.

Hab. in Polyporo noduloso, Wienerwalde Austriae inferioris.

4. **Pleosphæria Mølleriellæ** (Rick) Sacc. et Trott., *Acanthostigma Mølleriellæ* Rick, Broteria V (1906) p. 45. — Peritheciis superficialibus, in stromate *Mølleriellæ* gregariis, 50-100 μ . diam., sphaericis; spinulis usque ad 20 μ . longis; ascis primo oblongo-ovalibus, dein orbiformibus, breviter pedicellatis parte sporifera 40 \approx 10, octosporis; sporidiis conglobatis, multiserialibus, primitus hyalinis, dein flavo-brunneis, cylindricis, 3-4-septatis, uno septo longitudi-

nali muriformibus, 12×6 ; paraphysibus filiformibus, ascum obtegentibus et incurvatis, $1-2 \mu$. latis.

Hab. parasitica in stromate Møelleriellæ nutantis Rick, Rio Grande do Sul Brasilæ. — Ob sporidia muriformia non *Acanthostigma* sed potius *Pleosphaeria*.

CUCURBITARIA Gray — Syll. II p. 307, IX p. 915, XI p. 348, XIV p. 607, XVII p. 764.

1. *Cucurbitaria erratica* Peck, Bull. Torr. Bot. Club XXXIV (1907) 4820 p. 349. — Peritheciis caespitosis, subglobosis, plus minusve pilosis, nigris, in cortice immersis caespitulos orbiculares v. oblongos efformantibus, mox erumpentibus et epidermide rupta cinctis; ascis cylindraceis, $200 \times 20-22$; sporidiis plerumque monostichis, oblongis, coloratis, $5-7$ -septatis, $1-3$ loculis longitudinaliter divis, medio constrictis, $30-40 \times 15-20$, medietate basali sporarum magis angustiore quam altera; paraphysibus nullis.

Hab. in ramis siccis Æsculi glabræ, Oberlin Ohio Amer. bor. (F. O. GROVER). — Differt a ceteris spec. gen. *Cucurbitariæ* peritheciis pilosis et paraphysibus nullis, hinc rectius genus novum (*Peckiomycetes*).

2. *Cucurbitaria Pteleæ* Hollós, Ann. Mus. Nat. Hung. IV (1906) 4821 p. 331. — Peritheciis stromate nigro-brunneo insidentibus, erumpenti-superficialibus, dense gregariis, depresso-globosis, brunneo-nigris, granuloso-corrugatis, c. 0.5 mm. diam., ostiolo minuto papillato umbilicato; ascis cylindraceis, apice rotundatis, breviter stipitatis, $6-8$ -sporis, $200-245 \times 14$; paraphysibus filiformibus; sporidiis monostichis, oblongo-ellipsoideis, transverse $3-5$ -septatis, medio constrictis, loculo uno v. altero, rarius omnibus longitudinaliter divis, olivaceis $20-32 \times 10-12$.

Hab. in ramis siccis *Pteleæ trifoliatæ*, Nagy-Körös Hungariæ.

3. *Cucurbitaria adesmicola* Speg., An. Mus. Nac. Buenos Aires t. XIX 4822 (1909) p. 398. — Ramis infectis immutatis corticatis; peritheciis peridermio innatis per epidermidem erumpentibus constipatis globosis, $150-250 \mu$. diam., papillato-ostiolatis, carbonaceis; ascis subcylindraceis deorsum sensim cuneato-pedicellatis, $110-135 \times 20$, parce paraphysatis, octosporis; sporidiis subdistichis v. oblique monostichis, ellipsoideis, $3-5$ -septato-constrictis, $25-26 \times 12$, septo longitudinali fere semper donatis.

Hab. ad ramos languidos v. emortuos *Adesmiæ pinifoliæ*

in summis montibus Cacheuta prope Mendoza Rep. Argentina Amer. austr.

4. *Cucurbitaria Piceæ* Borthwick in Notes Roy. Bot. Gard. Edinburgh, XX (1909) p. 259, tab. 50. — Mycelio intercellulari: peritheciis arcte gregariis globoso-obovatis, obtusis, in stromate effuso breve crasseque stipitatis, carbonaceis, nigris; excipulo pseudo-parenchymatico extus denso, nigro, intus spongioso brunneo; ascis clavato-cylindraceis, filiformi-paraphysatis, 4-6-sporis; sporidiis monostichis, cymbiformibus, 4-10-septato-muriformibus, atrobrunneis, $20 \approx 6$.

Hab. in gemmis, quas maxime vexat, Abietis (Piceæ) pungentis cultæ in horto botanico Edinburgh Scotiae. — Cum *Cucurbitaria pityophila* comparanda, quæ imprimis sporidiis parcius septatis differre videtur.

Sect. 10. Scolecosporeæ.

CEUTHOCARPON Karst. — Syll. II p. 157, XIV p. 618, XVI p. 557.

1. *Ceuthocarbon sphærelloides* Rehm, Ann. Mycol. VI (1908) p. 322. 4324

— Peritheciis in maculis denigratis, suborbicularibus, 2-3 mm. latis, epiphyllis gregariis, innato-prominentibus, globosis, nigris, ostiolo vix conspicuo, contextu parenchymatico fusco, 0,15-0,2 mm. diam.; ascis cylindraceis, apice rotundatis, octosporis, 75-90 \approx 8-9; sporidiis filiformibus, rectis vel subcurvatis, hyalinis, 3-septatis, 45-50 \approx 2,5, parallele positiss; paraphysibus nullis.

Hab. ad folia Rosæ in horto, Rathen prope Königstein a. Elbe Germaniæ (W. KRIEGER). — Stromatis et ostioli defectu a gen. *Linospora* distinguendum.

OPHIOSPHERIA Kirschst., Verh. Bot. Ver. Brandenb. XLVIII (1906)

p. 47 (Etym. *ophis* anguis et *sphaeria* ob sporidia filiformia). — Perithecia libera, parva, parum elongata, subglobosa, tenui-membranacea, griseo-nigra, plerumque in greges late effusos aggregata, supra pilis firmis tecta. Asci tenui-tunicatis, cylindracei, supra rotundati, octospori. Sporidia filiformia guttulata unilocularia. — A *Niesslia* differt sporidiis filiformibus unilocularibus.

1. *Ophiosphaeria tenella* Kirschst. l. c. p. 47, cum icon. — Peritheciis laxè insidentibus, parvis, setulis 200 \approx 5; ostiolo indistincto;

Syll. fung. XXII (VII-1912)

ascis cylindraceis, sessilibus, octosporis, 130-160 \times 7-9; sporidiis inter se spiraliter connexis, hyalinis 1,5-2 μ . cr. primum guttulis; paraphysibus filiformibus hyalinis.

Hab. in foliis putrescentibus *Glyceria spectabilis* et *Caricis ripariæ*, prope Gross-Behnitz et Rathenow Germaniæ.

OPHIOSPHERELLA Speg., An. Mus. Nac. Buenos Aires, t. XIX (1909) p. 401 (Etym. *ophis* anguis quasi *Sphaerella* scolecospora). — Perithecia innata, globoso-lenticularia, minuta, submembranacea, poro pertusa. Asci aparaphysati, octospori. Sporidia filiformia, hyalina v. chlorina ascum subæquantia. — Est *Sphaerella* scolecospora.

1. *Ophiosphaerella graminicola* Speg., An. Mus. Nac. Buenos Aires 4326 t. XIX (1909) pag. 401, cum icon. — Maculis nullis sed matrice tota arescenti-pallescente; peritheciis parenchymate innatis laxe gregariis submembranaceis, lenticularibus 180-200 μ . diam.; ascis cylindraceis utrinque leniter attenuatis basi brevissime cuneato-pedicellatis, 150 \times 10, aparaphysatis, octosporis; sporidiis filiformibus rectis, multiguttulatis, chlorinis, 140 \times 3.

Hab. ad vaginas aridas *Lieptochloæ virgatæ* in hortis pr. Tucumán, Rep. Argentina Amer. austr.

PHYSALOSPORELLA Speg., Fungi Chilenses (1910) pag. 35 (Etym. demin. a *Physalospora*). — Perithecia macula stromatica determinata setulifera immersa, pauci-gregaria, minuta; asci cylindracei octospori, paraphysati; sporidia subacicularia, continua, hyalina.

1. *Physalospora chilensis* Speg., l. c. cum icon. — Stromatibus 4327 primo setuliferis dein glabratis, minutis amphigenis; peritheciis sæpius vix prominulis amphigenis 120-150 μ . diam.; ascis subcylindraceis 75-80 \times 6-7, octosporis; paraphysibus frequenter furcatis; sporidiis subbacillaribus utrinque angustatis, minute guttulis, 18-20 \times 2,5-3.

Hab. in foliis dejectis putrescentibus præcipue *Perseæ Lingue*, Cerro Caracol de Concepcion Chile, Amer. austr.

ACERBIA Sacc. — Syll. XI p. 353, XIV p. 619, XVII p. 768.

1. *Acerbia botryosa* Rehm, Ann. Mycol. VII (1909) p. 537. — Pe- 4328 ritheciis in soros orbiculares 3-5 mm. diam., demum confluentibus arcte congregatis, sessilibus, globosis, in rostrum breviter conoidum, obtusum abeuntibus, glabris, ad basim hyphis fuscis, septatis, longis, 5 μ r. obsessis, carbonaceis, 0,3 mm. diam., fusco-atris,

verruculosis; ascis tenerrimis, cylindraceo-fusoideis, $80-90 \approx 7$, 4-sporis, I.-; sporidiis filiformibus, utrinque acutatis, rectis, pluriguttulatis, hyalinis, usque ad $65 \approx 2$, parallele positis; paraphysibus tenerrimis, ramulosis.

Hab. ad ramulum? Sao Leopoldo Rio Grande do Sul Brasiliæ (THEISSEN S. J.) — Gen. *Ophiocerati* proxima sed rostro parvo diversa; an potius ad *Leptosporellam* pertineat incertum. Forsan in nov. gen. erigenda, cui nomen *Scolecobotrys* cl. Rehm proponit.

ACERBIELLA Sacc. — Syll. XVII p. 768.

1. *Acerbiella aquilæformis* Rehm, Ann. Mycol. V (1907) p. 529. — 4329

Peritheciis gregariis, late sessilibus, globulosis, apice truncatis, sæpe orbiculariter circumscriptis, planis, medio in papillulam conoideam brevem, poro pertusam abeuntibus, 1-2,5 mm. diam., crasse carbonaceis, in parte inferiore usque ad planitiem superiorem fusco-atris, hyphis plerumque rectis, parallelis, septatis, subfuscis, prælongis, 3 μ . cr., sæpe in fasciculos 50 μ . crassos coalitis obsessis, inde tegumento subfusco mycelii instar conjunctis, parte superiore perithecii plerumque applanata, rarius convexula, aterrimis, glabris; ascis fusiformi-cylindraceis, longe stipitatis $600 \approx 12$, tetrasporis, apice rotundatis incrassatisque; sporidiis filiformibus, obtusis, pluries septatis, quaque cellula guttulis 2 oleosis prædita, fuscidulis, c. $300 \approx 4$, in asco parallele spiraliter circumvolutis; paraphysibus filiformibus, hyalinis, septatis, 3-4 μ . cr.

Hab. ad truncos, Sao Leopoldo, Rio Grande do Sul, Brasiliæ (RICK). — Habitus omnino *Roselliniæ aquilæ* sed fructificatio prorsus aliena. *Acerbiella macrospora* partibus omnibus minoribus mox recedit.

2. *Acerbiella violacea* (Racib.) Sacc. et Trott., *Acanthostigma viola-* 4330

ceum Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 385. — Plagulis hypophyllis violaceis 0,5-1,5 cm. latis; hyphis violaceo-brunneis, multiseptatis, ramosis, 1,5-2,5 μ . cr., hyphopodiis v. setulis nullis; peritheciis numerosissimis, globosis, sessilibus, 220-260 μ . diam., minute papillato-ostiolatis, pilis violaceo-cupreis, deflexis 50-80 μ . long. tectis; parietibus tenuibus, brunneis, mollibus; paraphysibus filiformibus; ascis cylindraceis, octosporis, $74-80 \approx 9-11$; sporidiis subparallelis, linearibus, obscure nigris, multiseptatis, $50-60 \approx 1,5$.

Hab. parasitice in plagulis Meliolarum ad folia *Jambosæ* sp. Djasingo prope Buitenzorg Java. — Ob sporidia prælonga et

nigricantia ab *Acanthostigmata* omnino recedit; potius *Acerbiella* proxima.

BOMBARDIELLA v. Höhn. Fragm. Myk. VIII (1909) in Sitzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, p. 1192 (Etym. a gen. *Bombardia*, cui affinis). — Perithecia plerumque gregatim effusa in hypostromate tenui, pallido, superficiali insidentia, nigra, glabra, mollia, carnosio-membranacea, late ostiolata; pariete perithecii crasso tristratoso, strato medio hyalino, ceteris obscuris, parenchymaticis; asci octospori cylindracei, tenuiter tunicati; paraphysibus filiformibus; sporidia hyalina, filiformia, plurilocularia

1. *Bombardiella caespitosa* v. Höhn., l. c. pag. 1192. — Peritheciis 4331 pauci-gregariis, plerumque longitudinaliter dispositis, hypothallo molli pallido minute celluloso plectenchymatico, 20-30 μ . cr., carnosio-membranaceis, levibus, glabris, globosis, subpatelloideis, 400-450 μ . latis et altis, pariete perithecii basi 35-60 μ . cr. apicem versus usque ad 130 μ . cr., ostiolo 45-52 μ . lato aperto, tristratoso; paraphysibus numerosis, tenuiter tunicatis, non septatis, minute guttulatis, 3-6 μ . cr., laxis; ascis cylindraceo-clavatis, supra rotundatis, tenuiter tunicatis, basim versus conoideo-angustatis, 136-170 \times 12-16, octosporis; sporidiis parallelis, cylindraceo-filiformibus utrinque angustato-acutatis, supra saepe paullo latioribus, contentu nitido homoganeo, 14-15-septatis, hyalinis v. flavidulis, 120-124 \times 3,5-4,5.

Hab. in ramis putrescentibus *Amomi* sp. in silvis Tjibodas ins. Java.

LEPTOSPORA Fuck. — Sacc. Syll. II p. 198 (ut subgen.).

1. *Leptospora stictochætophora* Fairm., Proc. Rochester Ac. of Sc. 4332 IV (1906) p. 218, tab. XX, fig. 5-6. — Peritheciis sparsis vel gregariis, parvis, setulis obsitis, primum pallide brunneis dein obscurioribus; setulis acutis, canaliculatis, subcompositis, 150-250 \times 7-13; ascis late fusoides-oblongis, octosporis, breviter stipitatis, 80-90 \times 10-13; paraphysibus vix distinctis, albis; sporidiis irregulariter distichis, rectis v. curvis, cylindraceis v. allantoideis, utrinque rotundatis, guttula magna oblongo-ellipsoidea praeditis, hyalinis, 20-27 \times 4-6.

Hab. ad ramos decorticatos *Aceris* sp., Lyndonville New York Amer. bor.

2. *Leptospora sparsa* Sacc. et Fairm. in Saccardo, Microm. Amer. 4333

novi, Journ. of Myc. v. XII (1906) p. 49. — Peritheciis superficialibus, sparsis, globulosis, carbonaceis, nigris, glabris, 300–400 μ . diam., breviter obtusule papillatis; ascis elongato-cylindraceutis basi sensim tenuato-substipitatis, 112–120 \times 8–9, octosporis, apice paululum tenuatis rotundatisque; sporidiis distichis, cylindraceutis, sursum curvatis, 33 \times 4, continuis, hyalinis, eguttulatis.

Hab. ad ligna putrida in silvis pr. Lyndonville, New York Amer. bor. — Peritheciis laxè sparsis, glabris, minoribus, non pachydermaticis, sporidiis non nucleatis etc., a *Lept. spermoide* aliisque distinguenda species.

3. *Leptospora spermoide* (Hoffm.) Fuck. — Syll. II, p. 198 (*Lasiosphaeria*) — var. *rugulosa* Bres. in Rick, Fungi austro-amer. II, Ann. Myc. v. III (1905) p. 17, Broteria V (1906) p. 45; Exsicc. n. 41. — A typo differt peritheciis grosse rugulosis, ascis fusoides et sporidiis demum olivaceis, 1–3-septatis.

Hab. ad ligna in Brasilia.

Appendix: Sphæriaceæ fossiles.

- Sphærites Buxi* (Engelh.) Sacc. et Trott., *Sphæria Buxi* Engelh. 4335
Abhandl. Senckenb. nat. Ges. XXIX (1908).

Hab. in pliocæne super. in Germania.

- Sphærites carbonarius* Schuster, Geogr. Jahreshäfte, XX (1907). 4336

Hab. ad folia Cordaitis borassifolii in formatione carbonifera in Germania.

Fam. 3. Ceratostomataceæ WINT.

Sect. 1. Hyalosporæ.

CERATOSTOMELLA Sacc. — Syll. I p. 408, IX p. 573, XI p. 289, XIV p. 515, XVII p. 609. — Comparandæ sunt inter se species a cl. Münch ex Germania et a cl. Hedgecock ex America descriptæ.

1. *Ceratostomella Pini* Münch, Naturw. Ztsch. f. Land. u. Forst-wirtsch. V (1907) p. 531, cum icon. — Peritheciis subcorticis et ex ligno decorticato cyaneo-colorato erumpentibus, 70–100 μ . diam., levibus, rostello longo præditis; ascis globosis denique ex ostiolo fimbriato in massulas eructatis, continuis, 5 \times 1,5, curvulis, hyalinis.

Hab. in ligno cyaneo colorato pineo in Germania. — Status conidiophorus adest et *Cladosporii* spec. sistit: hyphis 20-50 fasciculatis, conidia hyalina continua 4-5 \times 1,5 gerentibus. Species hæc *Ceratostomellæ* nec non sequentes a Cl. Münch descriptæ et ex cultura eductæ, ex *Cerat. pilifera* (Fries) Fuck. sensu lato oriuntur.

2. *Ceratostomella Piceæ* Münch, Naturw. Ztschr. f. Land. u. Forst- 4338
wirtsch. V (1907) p. 531, cum icon. — Peritheciis nigris, carbonaceis, globosis, subdepressis, quandoque leniter pilosis, 160-240 μ . diam. et rostello 0,8-1,2 mm. longo, 20-30 μ . cr., irregulariter incurvato præditis; sporidiis ex rostelli apice fimbriato 20-50 μ . long., in massulas mucosas congregatis, cylindraceis utrinque rotundatis leviter curvulis, hyalinis, 3,5-4,5 \times 1,5-2; ascis 5-6 μ . latis.

Hab. in ligno abietino putri, in Germania. — Socius adest status conidicus *Graphium* sistens (capitulo conidia 3,5-4 \times 1,7 hyalina exerente) nec non *Cladosporii* forma fasciculata, conidia 6-8 μ . longa gerens.

3. *Ceratostomella cana* Münch, Naturw. Ztschr. f. Land. u. Forst- 4339
wirtsch. V (1907) p. 531, cum icon. — Peritheciis circ. 1 mm. long., 0,5 mm. crassis; statu conidico (*Graphium*) ab illo *Cerat. Piceæ* diverso.

Hab. in ligno pineo putri quod cyaneum reddit, in Lotharingia.

4. *Ceratostomella cærulea* Münch, Naturw. Ztschr. f. Land. u. Forst- 4340
wirtsch. V (1907) p. 531, cum icon. — Peritheciis ut in *C. Piceæ* sed mycelium et status conidiales diversa; hyphis mycelialibus mox obscuris, forma *Graphii* nulla, sed *Cladosporii* conidia 15-20 \times 3-3,5 v. conidia spicata.

Hab. in ligno pineo putri, quod cyaneum reddit, in Germania.

5. *Ceratostomella cyclospora* Kirschst., Verh. Bot. Ver. Brandenb. 4341
XLVIII (1906) p. 52. — Peritheciis solitariis v. congregatis in ligno denudato v. in cortice immersis, nigris, globosis, carbonaceis, granuloso-rugulosis, usque ad 1 mm. diam., rostello elongato sæpe tuberculoso et ostiolo umbilicato-depresso prædito; ascis cylindraceo-clavatis, tenuato-pedicellatis, crasse tunicatis, fragilibus, 30-40 \times 4-6, facile diffuentibus, octosporis; sporidiis monostichis v. irregulariter dispositis, hyalinis, cylindraceis, semilunatis v. plerumque fere circulariter incurvatis, circ. 4 μ . diam.; paraphysibus numerosis, ascos longe superantibus, filiformibus, hyalinis, 2 μ . crassis.

Hab. in ligno pineo putri in silvis prope Rathenow, Germania.

6. **Ceratostomella Schrenkiana** Hedgecock, 17th Ann. Rep. Miss. bot. 4342 Gard. St. Louis (1906) p. 67, cum icon. et tab. 3, fig. 6, tab. 4, fig. 1-4. — Peritheciis sphaericis, nigris 120-200 μ . diam., ostiolo rostellato glabro 0,8-1,2 mm. longo, 10-25 μ . diam., apice setulis brevibus 10-15 \times 2 hyalinis divergentibus coronato; ascis . . . ; sporidiis ellipsoideis sæpe curvulis utrinque acutiusculis 2,5-4 \times 1-1,5, hyalinis; conidiis in formam *Cephalosporii* digestis, ovato-cylindræis, hyalinis, 5-7.

Hab. in ligno, quod cyaneo tingit, Pini echinatae, Missouri et Arkansas Amer. bor. — Mycelium peculiare dendroideo-ramosum. Cfr. ejus ic. loc. cit. p. 68. — Ab affini *C. echinella* differt peritheciis superficialibus et apice non glanduloso-pubescentibus

7. **Ceratostomella capillifera** Hedgecock, 17th Ann. Rep. Miss. bot. 4343 Gard. St. Louis (1906) p. 71, pl. 3, fig. 1, pl. 6, fig. 2. — Peritheciis sphaeroideis, nigris, longe rostellatis et filamento hyalino undulato terminatis, basi hyphis v. pilis obscure brunneis tecta, 200 μ . circ. diam., rostello 1,5 mm. longo, 25 μ . cr., setulis terminalibus longis et angustis, 80 \times 1; ascis . . . ; sporidiis ex ellipsoideo reniformibus 4,5 \times 1,5; conidiis in formam *Cephalosporii* digestis, 6-8 \times 1,5-2, hyalinis.

Hab. in ligno, quod cyaneo tingit, Liquidambaris styra-cifluæ in Amer. bor. — Ab affini *Cerat. pilifera* differt longitudine rostelli, forma et magnitudine conidiorum sporidiorumque.

8. **Ceratostomella pluriannulata** Hedgecock, 17th Ann. Rep. Miss. bot. 4344 Gard. St. Louis (1906) p. 72, pl. 3, fig. 7, pl. 5, fig. 1-2. — Peritheciis ligno v. mycelio superficialibus, globosis 90-200 μ . diam., plerumque circ. 120 μ ., rostello 0,9-2 mm. longo, 10-30 μ . cr., plerumque 1,5 mm. longo, 25 μ . cr.; setulis terminalibus attenuatis 20 \times 2; ascis . . . ; sporidiis reniformibus, hyalinis, 4-5 \times 1,5-1,7, plerumque 4,5 \times 1,5; conidiis in formam *Cephalosporii* digestis, 5-8 \times 2-3, hyalinis.

Hab. in ligno, quod cyaneo tingit, Quercus rubrae, Mississipi Amer. bor. (PERL. SPAULDING). — Rostella apice regulariter fimbriata sed sæpe anulo altero setularum v. duobus a primo plus minus remotis prædita. Ab affini *Cer. pilifera* differt sporidiis minoribus et rostello plurianulato.

9. **Ceratostomella minor** Hedgecock, 17th Ann. Rep. Miss. bot. Gard. 4345 St. Louis (1906) p. 74, pl. 3, fig. 4, pl. 5, fig. 6-7. — Peritheciis

sphaeroideis, nigris, rugosis, 40-70 μ . diam., plerumque 52 μ ., rostello 120-160 μ . longo, plerumque 135 μ ., 6-12 μ . cr., apice setulis brevibus crassiusculis prædito; ascis e rotundato ovoideis, hyalinis, octosporis; sporidiis in duas tetrades dispositis 3,1-4,2 \approx 0,9-1,9, plerumque 3,5 \approx 1,5, hyalinis; conidiis in formam *Cephalosporii* digestis, ovoideo-oblongis, hyalinis, 4,5 \approx 2.

Hab. in ligno quod cyaneo tingit in Pini arizonicæ, Amer. bor. (A. D. HOPKINS). — *Cer. exiguæ* affinis sed compluribus notis diversa.

10. *Ceratostomella exigua* Hedgcock, 17th Ann. Rep. Miss. bot. Gard. 4846 St. Louis (1906) p. 76, pl. 3, fig. 2, pl. 6, fig. 4-7. — Peritheciis globosis, nigris, fragilibus, rugulosis, 60-80 μ . diam., plerumque 73 μ ., rostello 150-200 μ . longo, 8-18 μ . cr., plerumque 180 \approx 14, apice setulis brevibus angustis prædito; ascis hyalinis irregulariter ex ovoideo ellipsoideis, octosporis; sporidiis sæpe in duas tetrades dispositis, hyalinis, ellipsoideis, quandoque curvulis 2,1-2,8 \approx 0,8-1,1, plerumque 2,5 \approx 1; conidiis in formam fere *Cephalosporii* digestis, hyalinis, 3,5-4,5 \approx 1,6-2,2.

Hab. in ligno, quod cyaneo tingit, Pini virginianæ in Amer. bor. (A. D. HOPKINS). — Ab affini *C. microspora* E. et E. differt forma sporidiorum, magnitudine perithecorum et rostelli. A *C. minore* differt peritheciis majoribus, nec non numero, forma et magnitudine setularum.

11. *Ceratostomella moniliformis* Hedgcock, 17th Ann. Rep. Miss. bot. Gard. St. Louis (1906) p. 78, pl. 3, fig. 5, pl. 5, fig. 3-4. — Peritheciis e brunneo nigris, 90-180 μ . diam., spinulis conoideis 12-16 \approx 6 tectis; rostello e brunneo nigro, apice setulis hyalinis 12-18 \approx 2 prædito; ascis evanidis hyalinis, ovoideis, circ. 20 \approx 10; sporidiis hyalinis, non guttulatis, ovoideis, sæpe uno latere depressis, 4-5 \approx 3-4; conidiis moniliformiter digestis (*Cylindrii* ad instar) breviter cylindræis, 6-8 \approx 1,5-2,2, ex hyphis simplicibus enascentibus, ex albo cinereis.

Hab. in ligno, quod cyaneo tingit, Liquidambaris styracifluæ, prope Kirbyville Texas Amer. bor. (v. SCHRENK). — *C. piliferæ* affinis.

12. *Ceratostomella fusco-lutea* Rehm, Ann. Mycol. VI (1908) p. 320. 4348 — Peritheciis dispersis, ligno immersis, circa rostrum fusco-luteo-tincto, globosis, nigris, contextu parenchymatico, hyphis creberrimis, simplicibus, plerumque rectis, septatis, c. 200 \approx 3, per ligni fibras currentibus obsessis, 0,5 mm. diam., rostro glabro, ob-

tuso, nigro, c. 0,4-0,5 mm. longo prominente; ascis cylindraceutis, 90-100 \times 8-10, octosporis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, guttam oleosam magnam includentibus, hyalinis, 12 \times 5, 1- rarius superne 2-stichis; paraphysibus filiformibus 4-5 μ . cr., septatis, hyalinis.

Hab. in ligno decorticato fagineo, in faucibus montis Hochgrad Algoviæ (BRITZELMAYR). — A *Ceratostomella cirrosa* sporidiis diversissimis mox dignoscenda.

13. *Ceratostomella bambusina* v. Höhn., Stzb. k. Ak. d. Wiss. Wien 4349 CXVIII, Abt. I (1909) p. 337. — Peritheciis erumpenti-superficialibus, gregarie sparsis, nigris, carbonaceis, fragilibus, globosis, 230-240 μ . diam., rostello erumpente, usque ad 600 μ . longo, supra 60 basi 80 μ . cr., curvulo, hyphis septatis, obscure rubro-brunneis, levibus, 2-4 μ . cr., laxis tecto; paraphysibus crassiuscule filiformibus, indistinctis; ascis sessilibus, tenuissime tunicatis, cylindraceutis, 32 \times 3, octosporis; sporidiis monostichis, hyalinis, globosis, uniguttulatis, 2,5-3,5 μ . diam.

Hab. in culmis putrescentibus *Bambusæ* Tjibodas in insula Java. — *Cer. sphaerospermæ* Fuck. affinis.

14. *Ceratostomella mycophila* Rick, Broteria V (1906) pag. 48. — 4350 Stromate nullo; peritheciis in *Poria* quadam lignosa brunnea nidulantibus, $\frac{1}{8}$ mm. latis, ostiolum cylindricum atrum, 1 mm. altum $\frac{1}{8}$ mm. latum emittentibus, inter se liberis sed aggregatis; ascis sessilibus, paraphysatis, 25 \times 6; sporidiis biserialibus, cylindricis 5 \times 2, subflavidulis.

Hab. in *Poria* sp., Rio Grande do Sul Brasiliæ. — Species præclara vegetatione epipolyporea et defectu paraphysium distincta. Stroma nullum adest hinc ad *Valsam*, cui in ceteris satisfacit, duci nequit. An *Valsa* ob singularem habitationem astromatica evasa? Gen. *Massalongiella* caret ostiolo elongato, quare neque bene ad hoc genus species nostra ducenda.

ENDOCONIDIOPHORA Münch, Naturw. Ztschr. f. Land.-u. Forstwirtschaft. V (1907) pag. 531 (Etym. ex statu conidico endospore). — Perithecia ligni stratu brunneo (an potius cyaneo?) omnino immersa; contextu ex hyphis brunneis 200 \times 4-6 constituto; hyphis angulo recto surgentibus et ex interiore apicis conidia cylindrica hyalina 4-5,5 μ . long. biguttulata, emittentibus (*Chalara Ungerii* Sacc.).

1. *Endoconidiophora cærulescens* Münch, l. c. p. 531, cum icon. — 4351 Peritheciis carbonaceis, ligno immersis, globosis, subdepressis, 160-

240 μ . diam., rostello usque ad 800 μ . longo, præditis, pilis conspersis; sporidiis 6-8 \times 2, in apice rostelli in massulas congregatis.

Hab. in ligno pineo cyaneo tincto putri in Germania.

GNOMONIELLA Sacc. — Syll. I p. 413, IX p. 575, XI p. 289.

1. **Gnomoniella Catappæ** Koord., Botan. Untersuch. (1907) p. 192, 4352
fig. 19 I. — Maculis magnis, indeterminatis, arescendo fuscis; peritheciis stromate destitutis, tectis, coriaceis, nigris, globosis, 0,9 mm. diam., ostiolo cylindraceo 250-260 μ . longo, epidermidem perforante; ascis cylindraceis, 28-30 \times 5-6, apice incrassatis et poro pertusis, 8-sporis; sporidiis hyalinis, elliptico-oblongis, utrinque subacutis, 10-11 \times 2,5-3, continuis, biseriatis, rectis v. curvulis.

Hab. in foliis Terminaliæ Catappæ prope Purworedjo, Java (KOORDERS).

Sect. 2. Phaeosporæ.

CRYPTOASCUS Petri, Oss. sopra alcune malattie d. Olivo in Rend. Accad. Linc. (1907) p. 642 (Etym. *cryptos* abditus, et *ascus*). — Perithecia superficialia, simplicia, fragilia, atra, carbonacea, collo plus minusve elongato instructa, glabra, basi radicata; asci globulosi, sine ordine dispositi, monospori, gelatinosi, mox evanidi; sporidia ovoidea, atra, bitunicata.

1. **Cryptoascus oligosporus** Petri, l. c. cum icon. — Peritheciis irregulariter excipuliformibus, nigris, carbonaceis, collo plerumque elongato, basi hyphis nigris instructis, 100-215 \times 60-90; excipulo pseudoparenchymatico; ascis globosis, gelatinosis, hyalinis, 30-40 \times 15-20; sporidiis paucis, crassis, levibus, ovoideis, tunica fuliginea opaca obovolutis, 27-33 \times 15-18.

Hab. in radicibus Oleæ europææ in Italia centrali et meridionali.

CERATOSTOMA (Fr.) Sacc. — Syll. I p. 215, IX p. 481, XI p. 278, XIV p. 489, XVI p. 427, XVII p. 609.

1. **Ceratostoma crassicolle** Kirschst., Verh. Bot. Ver. Brandenb. XLVIII (1906) p. 52. — Peritheciis plerumque in ligno seriatim immersis, sed collo crasso et ostiolo scutellato prædito tantum prominentibus, nigris, globosis, crasse membranaceis, extus pilis brevibus, brunneis, patentibus tectis, $\frac{1}{4}$ mm. circ. cr.; ascis elonga-

to-clavatis v. subcylindraceis, supra rotundatis, longe pedicellatis, octosporis, $100-200 \approx 6$ (p. sp. $40-60 \mu$. longa); sporidiis distichis v. irregulariter dispositis, nigricantibus, cylindraceis, utrinque rotundatis, unilocularibus, rectis v. curvulis, $9-12 \approx 2,5-3$; paraphysibus numerosis, filiformibus, septatis, supra sensim acutatis, ascos superantibus, infra 3μ . cr.

Hab. ad truncos pineos putres, prope Gross-Behnitz Germaniæ.

2. **Ceratostoma Fairmani** Saccardo, *Microm. Amer. novi, Journ. of* 4355
Myc. v. XII (1906) p. 49. — Peritheciis late et laxè gregariis, ligno putri molli fere totis immersis, globulosis, $0,4-0,5$ mm. diam., nigris, glabris, rostellatis; rostello cylindraceo-acutiusculo, $500 \approx 100$, nitidulo, levissime longitrorsum sulcato; ascis fusoidè-clavatis, subsessilibus, deorsum sensim tenuatis obtusisque, apice quoque leviter tenuatis obtusisque, octosporis, $19-22 \approx 8-8,5$ aparaphysatis; sporidiis oblique monostichis v. subdistichis, ellipsoideis, $7 \approx 3-3,5$, e fronte rectis, e latere curvis, olivaceis, inæqualiter $1-3$ -guttulatis.

Hab. in truncis putridis pr. Lyndonville, New York Amer. bor. — Affine *C. avocettæ*, a quo differt ascis subfusoidèis, aparaphysatis, sessilibus, sporidiis brevioribus, etc.

3. **Ceratostoma Usterianum** Spegazz., *Fungi Paulist., Rev. Mus. La* 4356
Plata t. XV (1908) p. 18. — Peritheciis superficialibus arcte matrici adnatis, subiculo fumagineo destitutis sed hyphis paucis radiantibus repentibusque hyalinis ramulosis septulatis, $50-150 \approx 2-3$ radicatis, sparsis, vix perspicuis, globoso-depressis $80-100 \mu$. diam., glabris, coriacellis, contextu indistincto, antice ostiolo recto vel leniter arcuato cylindraceo prælongo $150-400 \approx 30-35$ opaco apice non v. vix subinflato et truncato penicillato-ostiolato terminatis; ascis fasciculatis aparaphysatis, antice obtusis postice cuneato-atenuatis longiusculeque pedicellatis, p. sp. $38-50 \approx 8-10$, ped. $20-30 \approx 2-3$, octosporis; sporidiis ellipsoideis v. cymbiformibus monov. distichis, utrinque acutiusculis, $11-13 \approx 4,5-5$, plus minusve pallide fuligineis.

Hab. ad folia coriacea arboris speciei ignotæ (Myrtaceæ?) cujusdam, Pinheiros perto de Sao Paulo et Ipiranga, Cambucy Brasi-liæ (USTERI). — Species mirabilis cum *Capnodiopside mirabili* P. Henn. non comparanda, a genere vita biophila recedens et facile novi generis typum sistens.

ACANTHORHYNCHUS Shear, Bull. Torr. Bot. Cl. XXXIV (1907) p. 313 et Cranberry Diseases. p. 27, t. III, f. 12-22 (Etym. *acantha* spina et *rhynchos* rostrum). — Perithecia submembranacea, sparsa, infossa, rostellata; rostello acuto, ostiolato; asci octospori, paraphysati; sporidia continua, brunneo-flava.

1. **Acanthorhynchus Vaccinii** Shear, l. c. p. 314. — Peritheciis amphigenis, sparsis, subglobosis, v. subphialiformibus, submembranaceis, immersis, parum prominentibus, 120-200 μ . diam.; collo valido, exerto, ostiolato, peritheciis tertiam v. dimidiam parte attingente, rostellis nigris continuis 50-70 \approx 8-9; ascis subellipsoideis v. subclavatis, subsessilibus, octosporis, apice poro apertis, 120-155 \approx 22-44; paraphysibus septatis, ascos excedentibus; sporidiis oblongo-ellipsoideis, continuis, pallide brunneo-flavis, muco mucilagineo circumdatis, 24-32 \approx 12-18.

Hab. in foliis *Vaccinii macrocarpi*, West Mills, New Jersey, Nova Scotia, Massachussetts, West Wirginia Amer, bor.

Sect. 3. Hyalodidymæ.

LENTOMITA Niessl — Syll. I p. 584, IX p. 698, XIV p. 542, XVII p. 663.

1. **Lentomita brasiliensis** v. Höhnelt, Ergebn. Bot. Exp. Südbrasil. 1901 4858 Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. p. 24. — Peritheciis gregariis, superficialibus, globosis, carbonaceis, supra glabris, infra hyphis circumdatis, 300 μ . diam. et collo cylindraneo nigricante 300-600 μ . longo, 45-50 μ . cr., apice pallidiore et usque ad 70 μ . clavato-incrassato; pseudoparaphysibus paucis tenuibus diffluentibus, septatis, 4 μ . cr., ascos longe superantibus; ascis numerosis, clavatis, tenuiter tunieatis, supra rotundatis, basi acutatis, 50-60 \approx 6-7, octosporis; sporidiis mono- v. distichis, hyalinis, ellipsoideis, extus mucosis, semper bilocularibus, ad septum non constrictis, plerumque 10 \approx 3, guttulatis.

Hab. in ligno indurato, in silvaticis prope Barra Mansa, alt. 1000 m., Sao Paulo Brasiliæ.

GNOMONIA Ces. et De Not. — Syll. I p. 561, IX p. 672, XI p. 302, XVI p. 483, XVII p. 664.

1. **Gnomonia Geranii** Hollós, Ann. Mus. Nat. Hungar. VII (1909) 4859 pag. 52. — Peritheciis sparsis v. laxè gregariis, globulosis, mem-

branaceis, nigris, 350-450 μ . diam., epidermide velatis, basi siccitate excavatis, contextu parenchymatico, ostiolo cylindraceo-rostellato, 170-250 \times 50, erumpentibus; ascis clavatis, subsessilibus, 36-40 \times 6-8, aparaphysatis, octosporis; sporidiis distichis v. oblique monostichis, fusoides, rectis v. curvulis, 4-guttulatis, demum tenuiter 1-3-septatis, non constrictis, hyalinis, 14-18 \times 2.

Hab. in caulibus siccis Geranii sanguinei prope Kecske-mét Hungariæ.

2. *Gnomonia tithymalina* Briard et Sacc. — Syll. IX, pag. 672. — 4360
var. *Sanguisorbæ* Rehm, Ann. myc. III (1905) p. 229. — Sporidiis rectis, oblongis, utrinque rotundatis, medio septatis, haud constrictis, quaque cellula biguttata, haud appendiculatis, 10 \times 2-2,5, distichis, ascis 4-6-sporis fusiformibus sessilibus, 25-27 \times 7-8.

Hab. in caulibus et petiolis præteriti anni Sanguisorbæ officinalis, Königstein Saxonie (W. KRIEGER).

3. *Gnomonia dilacerans* Rehm, Ann. Mycol. V (1907) pag. 538. — 4361
Peritheciis gregariis, innatis, globosis, glabris, ostiolo conoideo primitus per epidermidem prorumpente, dein epidermide dilacerata denudato, sessilibus, foveolam nigram relinquentibus, 0,5 mm. diam., contextu membranaceo, parenchymatico; ascis cylindraxis, longe stipitatis, p. sporif., 70 \times 7-8, octosporis; sporidiis fusoides, subobtusis, medio constrictis et septatis, utrinque 1-guttatis, hyalinis, rectis vel subcurvatis, 10-12 \times 3,5-4, monostichis; paraphysibus filiformibus, tenerrimis, septatis 3 μ . cr.

Hab. ad caules siccos Rubi Idæi in faucibus supra Razes Tirolie austr. (REHM). — A *Gnomon. depressula* sporidiis duplo amplioribus differt.

4. *Gnomonia Gei-montani* Ranojevic, Ann. Mycol. VIII (1910) p. 362. 4362
— Peritheciis sparsis, immersis, globosis, nigris, 210-500 μ . diam., rostro nigro usque ad 800 μ . longo, 38-47 μ . cr. præditis; ascis cylindrico-clavatis, elongato-fusoides, in pedicellum tenuem attenuatis, 36-53 \times 4-7,5, octosporis; sporidiis fusoides, bilocularibus, loculo inferiori angustiori, raro trilocularibus, 7,5-13,5 \times 1,5-2, hyalinis; paraphysibus nullis.

Hab. in foliis siccis Gei montani in M. Mindzur 2000 m. alt. in Serbia. — A *Gnom. Gei* rostro longiore, sporidiis fusoides inæqualiter septatis diversa.

5. *Gnomonia occulta* Kirschst., Ver. Bot. Ver. Brandenb. XLVIII 4363
(1906) p. 58. — Peritheciis hypophyllis, sparsis, nigris, minutis, tenui-membranaceis, immersis, rostello longiusculo prominentibus;

ascis cylindraceo-clavatis, quandoque fere fusoides, supra rotundatis bifoveolatis, sessilibus, octosporis, $30-40 \times 6-7$; sporidiis distichis, hyalinis, unilocularibus, fusoides, utrinque rotundatis vel subcylindraceis, hyalinis, minute multiguttulatis, rectis v. curvulis, demum subbilocularibus, loculo altero minore, $8-10 \times 2$; paraphysibus nullis.

Hab. in foliis emortuis *Potentillæ anserinæ*, Götting pr. Rathenow Germaniæ.

6. *Gnomonia herbicola* A. L. Smith, Trans. Brit. Mycol. Soc. III 4864 (1910) pag. 221. — Peritheciis immersis membranaceis, nigris, depresso-globosis, atro-brunneis, $200-250 \mu$. alt., $60-70 \mu$. cr.; ostiolo producto nigro; contextu peritheci e cellulis polygoniis crassiuscule tunicatis formato; ascis copiosis clavatis, fusiformibus, apara-physatis, crasse et breviter stipitatis, $25-40 \times 5-7$, octosporis; sporidiis ellipsoideo-fusiformibus continuis v. tenuiter uniseptatis, $3-4$ guttulatis, $8-12 \times 2-2,5$.

Hab. gregatim ad basim caulis viventis *Epilobii hirsuti*, Derbyshire Britanniae.

7. *Gnomonia intermedia* Rehm, Ascom. exsicc. fasc. 42, n. 1794; 4865 Ann. Mycol. VI (1908) p. 489. — Peritheciis dispersis, plerumque folii superiore pagina innatis, globulosis, nigris, tenuissime filiformiter rostratis, $120-150 \mu$. diam., rostro glabro c. 300μ . longo, 40μ . cr., subfusco, versus apicem obtusum hyalino; ascis clavatis, teneris, $30-33 \times 8-10$, octosporis; sporidiis subconstricto-didymis, utrinque obtusis, rectis, medio septatis, utraque cellula biguttulata, haud appendiculatis, hyalinis, $8-12 \times 3,5-4$, distichis; paraphysibus nullis.

Hab. in foliis putridis *Betulae albæ*, Neufriedenheim München, Bavaria (REHM). — A ceteris speciebus in *Betula* vigentibus bene distincta.

8. *Gnomonia Oryzæ* I. Miyake, Pilze Reispfl. Japan, Journ. College 4366 Agricult. Tokyo, II (1910) p. 250, t. XIII, f. 26-28. — Maculis albescentibus; peritheciis primum immersis dein rostratis prominentibus, phialiformibus $150-200 \mu$. long., $76-95 \mu$. v. plerumque $90-95 \mu$. diam., nigris, pseudoparenchymaticis; ascis elongato-ellipsoideis basi angustatis $38-45 \times 12-16$ plerumque 40×15 , octosporis; tunica supra tenui, infra crassa; sporidiis distichis v. irregulariter distributis, fusoides, rectis, bilocularibus, medio constrictulis, guttulatis, $15-16 \times 4-5,5$ sæpe loculis inæqualiter crassis.

Hab. in glumis *Oryzæ sativæ*, Awaji Japonia.

Sect. 5. Phæodidymæ.

RHYNCHOSTOMA Karst. — Syll. I p. 730, IX p. 750, XI p. 317, XIV p. 559, XVII p. 689.

1. *Rhynchostoma minutellum* v. Höhnelt, *Fragm. z. Mykol., Sitzb. k.* 4867 Ak. d. Wissensch. Wien Bd. CXVI Abt. I (1907) pag. 116. — Peritheciis sparsis, immersis, nigris, carbonaceis, levibus, 250 μ . diam., globosis, collo 250 μ . longo, 80 μ . cr. præditis; paraphysibus simplicibus, filiformibus, crassiusculis; ascis cylindræis, basi breviter stipitiformi-angustatis, 100 \times 5-7, octosporis; sporidiis oblique monostichis, ellipsoideis, griseo-fumoso-brunneis, bilocularibus, ad septum non constrictis, 7-10 \times 4.

Hab. in ligno abietino putri, Rekawinkel Austriæ inf. — Ab affinibus speciebus microsporibus rostello brevi et ascis cylindræis diversa.

2. *Rhynchostoma brasiliense* v. Höhnelt, *Ergebn. Bot. Exp. Südbras.* 4868 1901, *Denk. k. Ak. d. Wissensch. Wien, Bd. LXXXIII* (1907) *Extr.* pag. 24. — Peritheciis superficialibus, basi immersis, arcte gregariis, plerumque 2-3 approximatis confluentibusque, globosopiriformibus v. parum elongatis, carbonaceis, glabris, 400-500 μ . d. collo 200-300 μ . longo præditis; ascis numerosis, cylindræis, 50-60 \times 6-8, octosporis; paraphysibus numerosis, tenuiter filiformibus; sporidiis monostichis, bilocularibus, brunneis, elongatis, subfusoides, utrinque obtusatis, medio constrictis, loculo superiore plerumque crassiore, 8-10 \times 3.

Hab. in ligno indurato, in silvaticis prope Barra Mansa circ. 1000 m. alt. Sao Paulo Brasiliæ. — *Rh. cornigero* Karst. affine.

Sect. 6. Hyalophragmiæ.

CERATOSPHERIA Niessl — Syll. II p. 227, IX p. 870, XI p. 840, XVI p. 1137, XVII p. 715.

1. *Ceratosphæria cæspitosa* Lind et Vleugel, *Svensk Botan. Tidskr.* 4869 II (1908) pag. 365, fig. 1 *a, b*. — Peritheciis dense gregariis, ad substratum laxè affixis, subsphæroideis, coriaceis, nigris, circ. 0,8 mm. diam., ostiolo rostrato, cylindræo, sat crasso, firmo, circ. 0,4 mm. longo præditis; ostiolis e subiculo pulvinato prominentibus;

subiculo hyphis crassis, brunneis, septatis, repentibus, 4,3 μ . cr., e peritheciis exeuntibus formato; ascis numerosissimis, clavatis, subsessilibus, 50-65 \approx 8,7-10, octosporis; sporidiis monostichis v. subdistichis, oblongis, utrinque obtusis, 4-loculatis, ad septa constrictis, paullo curvatis, brunneis, 17-20 \approx 5-6, loculis duobus superioribus incrassatis; paraphysibus numerosis, septatis, ascos superantibus, ramosis, hyalinis, 2 μ . crassis.

Hab. in cortice ramulorum ex parte decorticatorum Ribis Grossulariæ, Vesterbatten, Suecia (VLEUGEL).

2. *Ceratosphæria macrorrhyncha* L. Gaja, Fl. micol. prov. Padova, 4370 p. 20 (sunto lit., 1911). — Peritheciis laxè gregariis v. solitariis, sæpe sub cortice relaxato ramorum decumbentibus, coriaceis, globosis, $\frac{1}{3}$ mm. diam. circiter, longe rostratis, siccis collabescentibus, atris; rostris cylindraceis, interdum ad apicem curvulis et attenuatis, 750-800 μ . longis; ascis breviter stipitatis, octosporis, cylindraceis, parte sporifera 200-230 \approx 10-11, hyalinis; paraphysibus tenuibus, ascos fere æquantibus, granulosis; sporidiis subfusoides, hyalinis, constanter 3-septatis, nos constrictis, 23-25 \approx 9-10, recte monostichis.

Hab. sub cortice relaxato ramorum emortuorum Buxi sem-pervirentis, Cattajo, prope Battaglia, in Euganeis Ital. bor. — A *Ceratosphæria occultata* Feltg. cui magis accedit, differt longitudine rostrorum, numero septorum et dispositione sporidiorum, necnon habitatione sub cortice relaxato.

HYPOSPILA Fr. — Syll. II p. 189, IX p. 849, XI p. 336, XIV p. 587.

1. *Hypospila bavarica* Rehm, Ann. Mycol. VI (1908) p. 322. — Pe- 4371 ritheciis in folio, pro parte dealbato, gregariis, epiphyllis, singulis maculæ orbiculari subfuscæ innatis, globosis, papillula brevissima conoidea, sæpe lateraliter emergente, nigris, glabris, 0,2 mm. d. contextu parenchymatico; ascis fusiformibus, 60 \approx 10, octosporis; sporidiis oblongo-fusoides, subobtusis, rectis vel subcurvatis, 1-septatis, haud constrictis, utraque cellula guttis duabus oleosis magnis repleta, utrinque brevissime appendiculatis, hyalinis, 12-15 \approx 3-3,5, distichis; paraphysibus nullis.

Hab. in folio putrido Aceris Pseudoplatani, Neufriedenheim pr. München (REHM).

2. *Hypospila ? rubicola* Speg., Fungi Chilenses (1910) p. 74. — Ma- 4372 culis nullis; peritheciis laxè gregariis epidermide clypeatim nigre-

facta velatis, lenticularibus, in sicco sæpius subcupulato-collapsis, 100-150 μ . diam.; ascis subcylindræis breviter pedicellatis, paraphysatis, octosporis, 70-90 \times 5-6; sporidiis rectis v. oblique monostichis, ellipsoideis, utrinque plus minusve acutiusculis, parvis, hyalinis, primo 1-septato-constrictulis, 4-blastis, dein 3-septatis, non constrictis, 11-14 \times 3-5.

Hab. in ramis siccis Rubi sancti, Bahia de Corral Chile Amer. aust.

Sect. 7. Phæophragmiæ.

RHYNCHOSPHERIA Sacc. — Syll. II p. 112 et 228, XVI p. 524, XVII p. 740.

1. *Rhynchosphæria chætosporioides* Rehm, Ann. Mycol. VI (1908) 4373 p. 322. — Peritheciis gregariis, emergentibus, dein sessilibus, globosis, contextu parenchymatico molli, nigris, 100-150 μ . diam., hyphis simplicibus fuscis, septatis, 30-60 \times 4-5, obtusis, sparsis obsessis, in rostrum 600 \times 30 filiforme glabrum elongatis; ascis ovoideo-clavatis, sessilibus, octosporis, 35 \times 10-12; sporidiis fusoido-ellipticis, 3-septatis, ad septa haud constrictis, rectis, cinereo-fusculis, 10-12 \times 4, di-tristichis; paraphysibus ramosis, conglutinatiss.

Hab. ad lignum putridum pineum in monte Arber Silvæ bavaricæ (REHM).

2. *Rhynchosphæria megas* Rehm, Ann. Mycol. VII (1909) p. 536. — 4374 Peritheciis gregariis, primitus innatis, dein, ligno corroso, fere sessilibus, globosis, papillula conoidea elongata, apice obtusa, poro perspicuo pertusis, carbonaceis, fusco-atris, glabris, senilibus verruculosus, 1-2 mm. diam. et altis; ascis cylindræis, longe stipitatis, p. sporif. 100 \times 12, octosporis, J -; sporidiis ellipsoideis, utrinque rotundatis, 3-septatis, unaquaque cellula 1-guttata, rectis, fusciculis, cellulis terminalibus brevioribus et subhyalinis, ad septa subconstrictis, 16-17 \times 6, monostichis, subinde distichis; paraphysibus filiformibus.

Hab. in ligno putrido Sao Leopoldo, Rio Grande do Sul, Brasilis (THEISSEN S. J.). — *Rh. ceratophoræ* proxima.

Sect. 8. Hyalodictyæ.

RHAMPHORIA Niessl — Syll. II p. 307, IX p. 913.

1. *Rhamphoria icterodes* (Riess) Sacc., in Ann. Myc. IX (1911) p. 250, 4875
Sphaeria icterodes Riess in Klotzsch, Herb. mycol. Cent. XVIII, n. 1739, Bot. Zeit. 1853, p. 236, Hedwigia I, p. 24, t. III, f. i, l, k.
 — Sparsa, lignicola, immersa, interiorem ligni partem circumeirca colore citrino tingens; peritheciis coriaceis nigris, subglobosis, 360-376 μ . diam., contextu pseudoparenchymatico obscure fuligineo, ostiolo tereti-conoideo erumpente apice poro pertuso, perithecium subæquante; ascis tubulosis, octosporis, 100-115 \approx 7; paraphysibus filiformibus mucosis; sporidiis uniserialibus, oblongis, utrinque rotundatis, 14-15 \approx 5-5,5, pellucidis, guttulas numerosas irregulariter positas, sæpius 3-5-seriatis, minutas continentibus, demum 3-5-clathrato-pseudoseptatis.

Hab. in lignis arboris frondosæ in Germania. — Perithecia, amisso ostiolo, sæpe collabascunt. Species mihi diu obscura, tandem inspecto specimine originali, clare innotuit.

2. *Rhamphoria thelocarpoidea* v. Höhnelt, Stzb. k. Ak. d. Wiss. Wien, 4876 CXVI (1007) p. 124, *Coronophora thelocarpoidea* v. Höhnelt, Stzb. k. Ak. d. Wiss. Wien, CXV, Abt. I (1906) p. 13. — Peritheciis nigris, carbonaceis, pro more piriformibus, e subcutaneo dein nudatis et superficialibus, conico-papillatis et poro minuto pertusis, solitariis v. 2-pluribus coacervatis, 220-260 μ . lat., 300-360 μ . alt.; ascis paucis, non v. breviter pedicellatis, clavatis, sursum tenuatis apiceque truncatis, 170-200 \approx 14-16; sporis spermatioideis ovoideo-oblongis, 2 \approx 1, hyalinis, creberrimis, sporidia occultantibus; sporidiis genuinis monostichis clavato-oblongis, 27 \approx 7, hyalinis, 7-8-septatis muriformibusque.

Hab. in ramo partim decorticato putrescente Fagi silvaticæ, Wienerwald prope Vindobonam Austriæ. — Affinis *Rhamphoria tympanidisporæ* Rehm.

Sect. 9. Scolecosporæ.

OPHIOCERAS Sacc. — Syll. II p. 358, IX p. 938, XI p. 353, XIV p. 616.

1. *Ophioceras Bambusæ* v. Höhn., Stzb. k. Ak. d. Wiss., CXVIII, 4877

Abt. I (1909) pag. 337. — Peritheciis sparsis, epidermide tectis, nigris, pellucidis, depressis, subscutellatis, levibus, nitidulis, ellipsoideis, usque ad 1 mm. long. et $\frac{2}{3}$ mm. latis, rostello 60-100 μ . lato, fragili, erecto, curvulo, 2-2,5 mm. longo, nigro præditis; ascis cylindræis, subfusoides, breviter crasseque pedicellatis, obtusis, tenuiter tunicatis, 90-95 \times 5,5-6,5, e tetrasporo octosporis; pseudoparaphysibus numerosis, plerumque ascos longe superantibus, tenuissime tunicatis, guttulatis, septatis, 4-10 μ . cr.; sporidiis hyalinis, filiformibus, utrinque angustato-obtusulis, indistincte septatis, incurvatis, 70-80 \times 1,5.

Hab. in culmo putri Bambusæ, Tjibodas in ins Java.

2. **Ophioceras Corni** Richon, Catal. Champ. Marne pag. 327 et 524, 4378 c. ic. — Peritheciis in greges parvos dispositis, sphaeroideis, nigris, ostiolo longo flexuoso donatis; ascis cylindræis; sporidiis filiformibus crebro guttulatis, 45 μ . longis.

Hab. in ramis decorticatis Corni sanguineæ in Gallia.

OPHIOGNOMONIA Sacc. — Syll. I p. 419, XIV p. 613, XVII p. 776.

1. **Ophiognomonina Padi** Jaap, Verh. Bot. Ver. Brandenb. XLVII 4379 (1905) p. 87. — Peritheciis gregariis plerumque hypophyllis et in maculis magnis pallescentibus insidentibus, immersis, globosis, 0,5 mm. latis, ostiolo rostellato 1-1,5 mm. longo, nigro, recto præditis; ascis elongato-fusoides, basi in pedicellum attenuatis, octosporis, 60-63 \times 5; sporidiis filiformibus, supra usque ad 2 μ . incrassatis, obtusis, 42-51 μ . long., 1,2-1,5 μ . cr., hyalinis, minute guttulatis, fasciculatis.

Hab. in foliis Pruni Padi prope Triglitz in Prignitz Germaniæ. — Verisimiliter status conidicus huius speciei est *Asteroma Padi* DC. Incertum est an *Sphaeria padicola* Lib. huc pertineat.

2. **Ophiognomonina helvetica** Rehm, Ann. Mycol. V (1907) p. 543. — 4380 Peritheciis sparsis, globulosis, hypophyllis et in epiphyllis protuberantibus, innatis, ostiolo papilliformiter prominente, 0,25 mm. d., glabris; contextu parenchymatico; ascis creberrimis, cylindræis, ca. 200 \times 8-9, octosporis; sporidiis filiformibus, pluri-guttulatis, haud septatis, hyalinis, ca. 150 \times 1,5, parallele positæ, extra ascum mox vermiformiter curvatis; paraphysibus nullis.

Hab. in foliis siccis Salicis herbaceæ, Lajett ad Pic Aela, Graubünden Helvetiæ (Dr. VOLKART).

3. **Ophiognomonina caulicola** v. Höhn. Fragm. Mykol. VIII (1909), in 4381 Sitzb. k. Ak. d. Wiss. Wien CXVII, Abt. I, p. 1213. — Peri-

theeciis solitariis v. plerumque seriatas v. gregariis, sæpe fere confertim effusis, in cortice interne nidulantibus, basi applanata indentibus, dein cortice secedente liberis, globosis, 360-450 μ . latis, 300 μ . altis, rostello 1-2 mm. longo, cylindraceo, basi circ. 100 μ . supra 60 μ . crasso præditis, levibus, glabris, carbonaceis, nitidulis, æqualiter tenuiter incrassatis, fragilibus, opacis, nigris; paraphysibus nullis; ascis fusoideo-clavatis, tenuiter tunicatis, sessilibus, $84 \times 5,5$ quique-octosporis; sporidiis subparallelis, cylindraceo-filiformibus, utrinque obtusis, unilocularibus, multiguttulatis, $50-60 \times 1,5$.

Hab. in ramis emortuis putrescentibus, verisimiliter *Salviæ glutinosæ* prope Ybossitz in Austria inf. (STRASSER).

LINOSPORA Fuck. — Syll. II p. 354, IX p. 935, XI p. 352, XIV p. 618, XVII p. 775.

1. *Linospora Elasticæ* Koord., Botan. Untersuch. (1907) pag. 193, 4882 fig. 20. — Peritheciis atris, gregariis, foliorum parenchymate immersis, epidermide tectis, demum perforantibus, ovoideo-globulosis, 0,22 mm. latis, clypeo discoideo vel pulvinato, in vivo succoso, sordide albo v. flavescens-albo 0,28 \times 0,42 mm. lato, ostiolo capillari, nigro, glabro, rectiusculo v. curvulo, facile deciduo, 600 μ . longo, 30 μ . lato; ascis cylindraceis, apice rotundatis, subsessilibus per basim dehiscentibus, 88-98 \times 4-4,5 fasciculatis, apapophysatis; sporidiis 8 bacillaribus, continuis, rectiusculis v. curvulis, 84-88 \times 1-1,5, utrinque truncatis, hyalinis, multiguttulatis.

Hab. in foliis putrescentibus *Fici elasticæ* prope Purwo-redjo prov. Kedu in ins. Java (KOORDERS). — *Linosp. capillari* Penz. et Sacc. proxima, differt sporidiis tenuioribus et clypeo carnoso.

2. *Linospora subtropicalis* Speg., An. Mus. Nac. Buenos Aires t. XIX 4888 (1909) p. 403. — Peritheciis epidermide persistente scutatim nigrefacta tectis, lenticularibus, 150-180 μ . diam., vix papillato-ostiolatis; ascis fusoideis apice crasse tunicatis basi breviter cuneato-pedicellatis, 90-110 \times 10, octosporis; sporidiis hyalinis, pluriguttulatis 70 \times 1.

Hab. ad scapos aridos *Oncidii* ejusdam in silvis primævis secus Rio San Lorenzo, Salta, Argentina Amer. austr.

OPHIOBOLUS Riess — Syll. II p. 337, IX p. 923, XI p. 351, XIV p. 614, XVI p. 557, XVII p. 769. — Plæræque species donantur

ostiolo non vere rostellato sed papillato, hinc genus hoc, demptis nonnullis speciebus, potius Sphæriaceis quam Ceratostomataceis adscribendum videtur.

1. **Ophiobolus styracincola** Rehm, Ann. Mycol. V (1907) p. 529. — 4384

Peritheciis dispersis, in hypophyllo immutato, inter pilos folii sessilibus, globosis, 150 μ . diam. in papillulam 60 μ . longam, 40 μ . lat. abeuntibus, glabris, contextu parenchymatico membranaceo, fusco; ascis cylindraceo-clavatis, apice rotundatis, 100-120 \times 9-10, tetrasporis; sporidiis filiformibus, apice obtusis et sublatioribus, infra acutatis, 8-10-septatis, quaque cellula biguttata, hyalinis, 80 \times 2,5, parallele positis; paraphysibus subramosis, 1,5-2 μ . cr., hyalinis.

Hab. ad folia Styracis, Sao Leopoldo, Rio Grande do Sul, Brasilia (Rick). — *Oph. Tanacetii* affinis.

2. **Ophiobolus minor** Bubák, Ann. Mycol. IV (1906) p. 110. — Pe- 4385

ritheciis globosis vel leniter depressis, cortice immersis vel collo brevi vix prominulis, dein erumpentibus, nigris, nitidulis, 200-300 μ . diam., contextu parenchymatico olivaceo; ascis cylindraceis 65-90 \times 7-9, rectis v. curvulis, supra rotundatis, basi breviter pedicellatis, paraphysibus filiformibus immixtis; sporidiis filiformibus plus v. minus incurvatis, 55-70 \times 2-2,5, utrinque acutatis, multiguttulatis, pluriseptatis, hyalinis.

Hab. in ramulis vivis Loniceræ Xylostei prope Tabor in Bohemia.

3. **Ophiobolus microstomus** Speg., Fungi Chilenses (1910) p. 95. — 4386

Peritheciis sparsis v. laxe gregariis, primo tectis dein nudis, superficialibus, subglobosis, superne acutato-ostiolatis, duris, carbonaceis, glabris, 200-250 μ . diam.; ascis linearibus breviter pedicellatis dense paraphysatis, 170 \times 10; sporidiis octonis asco conspicue brevioribus, filiformibus, chlorinis, pluriseptatis, 90-100 \times 2.

Hab. in pedunculis emortuis putrescentibus Lobeliæ Tupæ prope Ciudad de Valdivia Chile Amer. austr. — *Oph. porphyrogono* (Tode) affinis sed differt sporidiis brevioribus, ostiolo minus distincto, maculis nullis.

4. **Ophiobolus sceliscophorus** Fairm., Proc. Rochest. Ac. of Sc. IV 4387

(1906) p. 215, tab. XX, fig. 1. — Peritheciis minutis, nigris, in maculis arescentibus insidentibus; ascis clavato-cylindraceis, plerumque incurvatis, raro rectis, 90-100 \times 10; paraphysibus non visis; sporidiis filiformibus, incurvatis, 10-11-septatis, articulis versus apicem sæpa subincrassatis, hyalinis, 90 \times 2,5-3.

Hab. in foliis *Phlogis Drummondii*, Lyndonville New York Amer. bor. — *Etym.* a *sceliscos* crus, ob formam sporidiorum.

5. *Ophiobolus hypophyllus* Rehm, Ann. Mycol. VI (1908) p. 317. — 4383
Peritheciis in hypophyllo late hyalino-flavidulo dispersis, primitus innatis, dein emergentibus, globulosis, vix papillulatis, glabris, nigris, 150 μ . diam., contextu parenchymatico, fusco; ascis cylindraceis, apice rotundatis, 80-100 \times 8-10, tetrasporis; sporidiis filiformibus, rectis, utrinque obtusis, 7-septatis, quaque cellula biguttata, hyalinis, 60-80 \times 2-2,5, parallele positis; paraphysibus filiformibus, septatis, 2 μ . crassis.

Hab. ad folia viva *Solanaceæ*, cujusdam Sao Leopoldo, Rio Grande do Sul, Brasilæ (RICK S. J.).

6. *Ophiobolus Rostrupii* Ferdinandsen et Winge, Botan. Tidsskrift 29 Bd. (1909) p. 317, fig. 6. — 4389
Peritheciis amphigenis, primo tectis, dein epidermidem pustuliformiter levatam perforantibus, lenticulari-globosis, 300-400 μ . diam., vix ostiolatis, poro circ. 30-40 μ . diam. pertusis, submembranaceis, atris; ascis cylindraceis, apice rotundatis, deorsum attenuatis, sessilibus, 130-140 \times 14-16, junioribus membrana valde incrassata, poro nullo; sporidiis octonis, filiformibus, flexilibus, sæpius parallele fasciculatis, septis 6-7 genuinis, nonnumquam paucis spuriis instructis, ad septum tertium v. quartum profundius constrictis, ceterum vix constrictulis, 115-135 μ . long. ad constrictionem profundam utrobique 4,5-5,5 μ . lat., hinc apicem versus lenissime, basim versus magis attenuatis, superne 3-4 μ ., inferne 1-2 μ . lat., hyalinis; paraphysibus laxis, evanidis, tenuissime septatis, hyalinis, ascos superantibus.

Hab. ad folia viva *Brunellæ* sp. in Insula Unalaska Aleutarum Amer. bor.

7. *Ophiobolus phragmosporus* Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 402. — 4390
Peritheciis matrice atrata sparsis, erumpenti-subsuperficialibus, subconoideis, acute majusculeque papillato-ostiolatis 200-250 μ . diam., atris; ascis linearibus breviter cuneato-pedicellatis 170-180 \times 14-15, paraphysatis, octosporis; sporidiis fasciculatis flavidulis, fragilissimis, 120-140 \times 4-5, articulis cylindraceis 12-15, brevibus, grosse biguttulatis præditis.

Hab. ad caules aridos *Echii plantaginei* in pratis La Plata, Argentina Amer. austr. — Species eximia mox dignoscenda.

8. *Ophiobolus rivulariosporus* Starb., Ascom. Schwed. Chaco-Cordill. Exp., Arkiv f. Bot. t. V (1905) p. 24, fig. 20. — 4391
Peritheciis immersis, per epidermidem fissam erumpentibus, demum liberatis,

superficialibus, interdum sparsis, sæpissime seriatim vel aliter aggregatis, conoideo-globosis, manifestim, interdum abrupte, conice vel fere cylindrice papillatis, totis glabris, perpaulum rugosiusculis, contextu coriaceo, basim versus prosenchymatico, cellulis seriatis, ostiolum versus globulosis, atratis, sub lente nigro-fulgineis c. 300 μ . diam.; ascis octosporis, cylindraceo-clavatis, sursum rotundatis, sessilibus, 139-150 \times 12,5-14; sporidiis fasciculatim conglobatis, clavulato-filiformibus, sursum appendice mucosa, sphæroidea, circa 5 μ . diam. semper ornatis, clavulatim incrassatis, clavula sæpissime triseptata, ad inferius septum paulum constrictis, deorsum sensim et attenuatim acutatis, guttulis moniliformiter ordinatis præditis, deinde totis septatis, chlorino-olivaceis, 127-135 μ . longis, superne 4,5 μ ., inferne 2,5 μ . crassis; paraphysibus filiformibus, conglutinatiss, hyalinis.

Hab. in caulibus aridis *Compositarum* sp., Tarija Bolivie.

— Fabrica sporidiorum pulcherrima hæc species prædistincta.

9. **Ophiobolus chilensis** Speg., *Fungi Chilenses* (1910) pag. 95, cum 4392 icon. — Maculis nullis; peritheciis laxè gregariis, primo epidermide tectis dein erumpentibus v. denudatis atris, e globoso subconoideis, 150 μ . diam., glabris sed basi sæpius hyphis paucis, 50-100 \times 3-4 cinctis, ostiolo acutiusculo papillato coronatis, coriacellis; ascis cylindraceis modice attenuato-pedicellatis, paraphysatis, 170 \times 12; sporidiisasco dimidio brevioribus, acicularibus, 15-locularibus, loculo quarto supero leniter inflato, obscure chlorinis, 80-85 \times 3-5.

Hab. in pedunculis emortuis putrescentibus *Cirsii lanceolati* prope Ciudad de Valdivia Chile Amer. austr.

10. **Ophiobolus Morthieri** Sacc. et Berl. — Syll. IX, p. 920. — var. 4393 **Senecionis** Rehm in Strasser, *Verh. k. k. zool.-bot. Ges. Wien* LVII (1907) p. 318. — Peritheciis globosis 1,5 mm. diam., pilis brunneis obsitis, collo elongato usque ad 200 μ . longo præditis; ascis octosporis 120-180 \times 6-8; sporidiis filiformibus ascos subæquantibus.

Hab. in caulibus emortuis *Senecionis nemorensis*, Holzschlängen Sonntagberg Austria inf.

11. **Ophiobolus tenellus** (Awd.) Sacc. — Syll. II, pag. 346. — var. 4394 **Lactuæ** Rehm, *Ascom. Exsicc. fasc. 43, n. 1808 et Ann. Mycol. VII* (1909) p. 136. — Peritheciis denique omnino immersis, ostiolo vix emergente et sensim cylindraceo; ascis 150 \times 8-9, 8-sporis; sporidiis parallele dispositis, luteolis, 8-12-cellularibus, 100 \times 1,5-2, extra ascum mox incurvatis.

Hab. in caulibus emortuis *Lactucæ salignæ* prope Grosshadern München Bavariz (REHM).

12. **Ophiobolus Broussonetiz** Hollós, Ann. Mus. Nat. Hungar. V 4395 (1907) pag. 46. — Peritheciis primum epidermide tectis, demum erumpentibus, nigris, 450-550 μ . latis, ostiolo cylindraceo-conico, 170-280 \times 140; ascis cylindraceis, apice rotundatis atque incrassatis, breve stipitatis, octosporis, 150-160 \times 3,5-4, filiformi paraphysatis; sporidiis æqualiter filiformibus, rectis v. curvulis, continuis, hyalino-luteolis, asco æquilongis, 0,5 μ . cr.

Hab. in ramulis siccis *Broussonetiz* papyriferae, Kecskemét Hungariæ.

13. **Ophiobolus Nipæ** P. Henn., Hedwigia XLVII (1908) p. 257. — 4396 Peritheciis gregariis innato-erumpentibus, rotundato-depressis, atris ostiolo conoideo, 0,5-0,6 mm. diam.; ascis cylindraceo-clavatis, vertice obtuso-rotundatis, curvulis, 8-sporis, 100-120 \times 10-13; sporidiis filiformibus, parallelis, utrinque obtusis, curvulis, pluriseptatis, 80-100 \times 2,5-3,5, hyalinis.

Hab. in petiolis emortuis *Nipæ urticantis*, Luzon, Prov. Pampanga San Esteban Ins. Philippin. (MERRILL).

14. **Ophiobolus Livistonæ** P. Henn., Hedwigia XLVII (1908) p. 257. 4397 — Peritheciis gregariis innato-erumpentibus, superficialibus, rotundato-depressis, atris, conico-ostiolatis, 0,4-0,5 mm. diam.; ascis cylindraceo-fusoideis, obtusiusculis, paraphysatis, 8-sporis, 80-110 \times 5-8; sporidiis parallelis, filiformibus, obtusis, pluriseptatis hyalinis, 70-80 \times 2.

Hab. in petiolis emortuis *Livistonæ*, Mindanao, Davao Ins. Philippin. (COPELAND).

15. **Ophiobolus Oryzæ** I. Miyake Pilze Reispfl. Japan (in Journ. College 4398 Agricult. Tokyo, II (1910) p. 249, t. XIII, f. 20-22. — Peritheciis nigris, crasse pseudoparenchymaticis, globosis v. ellipsoideis, immersis sed ostiolo verruciformi prominulis, 250 μ . circ. diam., 300 μ . circ. altis; ascis cylindraceis, 125-150 \times 8-10, octosporis; paraphysibus filiformibus ascis æquantibus v. parum longioribus; sporidiis filiformibus, curvatis et contortis, 5-7-septatis, obscure flavis 100-130 \times 2-3.

Hab. in foliis et glumis *Oryzæ sativæ* in Japonia.

16. **Ophiobolus Ellisianus** Berlese, Icon. fung. II, p. 127, t. 154, f. 2. 4399 — Peritheciis sparsis, atris, primo tectis, dein prominulis, membranaceis, globoso-depressis, ostiolo minuto papillato, obtusulo, $\frac{1}{4}$ mm. diam.; ascis cylindraceo-clavulatis, 170-190 \times 11-13, basi atte-

nuato-stipitellatis, octosporis; sporidiis longe cylindraceis crebre 23-26-pseudoseptatis, utrinque rotundatis, 150-165 \approx 3-4, lutescentibus, loculis omnibus subæqualibus, non secedentibus.

Hab. in caulibus herbaceis, Utah Amer. bor. (J. B. ELLIS).

Fam. 4. Xylariaceæ TUL. ()*

Sect. 1. Phæosporæ.

HYPOXYLON Bull. — Syll. I p. 352, IX p. 543, XI p. 385, XIV p. 509, XVI p. 445, XVII p. 855.

1. **Hypoxylon lichenicola** v. Höhnelt, *Ergeb. Bot. Exp. Südb. 1901*, 4400 *Denk. k. Ak. d. Wiss. Wien Bd. LXXXIII (1907) Extr. p. 26.* — Stromatibus erumpentibus demum superficialibus, parvis, irregulariter rotundatis; peritheciis 1 v. paucis v. numerosis et tunc 2-4 seriatis, globosis, distincte papillato-ostiolatis, carbonaceis, nigris, opacis et sæpe rugulosis, 600-1000 μ . diam., prominentibus v. plus minus immersis; ascis cylindraceis 160-180 \approx 10-12, octosporis; paraphysibus numerosis, filiformibus, ascos longitudine æquantibus, demum mucoso-diffluentibus; sporidiis monostichis, elongato-fusoideis, utrinque obtusis, nigris, unilocularibus, 30-38 \approx 8-9,5.

Hab. parasiticum in podetiis sterilibus *Cladoniae* (?) sp. ad flumen Rio Pardo in districtu S. Cruz Sao Paulo Brasilæ.

2. **Hypoxylon bogoriense** von Höhnelt, *Stzb. k. Ak. d. Wiss. Wien 4401 CXVIII, Abt. I (1909) pag. 341*; Rehm, *Ascom. exs. fasc. 44, n. 1844, Ann. Mycol. VII (1909) p. 404.* — Stromate tenui late effuso, plerumque usque ad 20 cm. et ultra longo, primum violaceo-brunneo dein obscuriori striato, margine acuto v. sensim defluente; peritheciis arcte gregariis, prismaticis, 600-700 μ . altis, 260 μ . latis, convexulis, peritheciis centralibus usque ad 100 μ . lat. ostiolato-papillatis; ascis cylindraceis, numerosis, octosporis, 65 \approx 3; sporidiis laxè monostichis, elongato-cylindraceis, rectis v. vix cur-

(*) Cfr. F. Theissen, *Xylariaceæ austro-americanæ*, in *Ann. Mycol. VI et VII (1908-1909)* et *Xylariaceæ austro-brasilienses*, in *Denkschr. k. Akad. Wien LXXXIII (1909)*.

vulis, utrinque rotundatis, pallide brunneo-violaceis, 5,5-6 \approx 1,8-2; stromate intus fragili, carbonaceo.

Hab. in ramis putrescentibus Albizziæ moluccanæ, in Horto bot. Buitenzorg in ins. Java.

3. **Hypoxylon Starbäckii** Ferd. et Winge, Botanisk Tidsskrift XXIX 4402 (1908) p. 14, *Hypoxylon areolatum* Starb., Ascom. Schw. Chaco-Cordill. Exp., Arkiv f. Bot. Bd. V (1905) p. 31, fig. 22, non B. et Curt. — Syll. I, pag. 366. — Stromatibus applanatis vel fere hemisphærico-pulvinatis, superficialibus, margine tumido, fere libero, superficie primo levigata, verticibus perithecorum applanatis, irregulariter polygono-limitatis in areolas divisus, demum hinc inde tuberculosis, pruina primo ferrugineo-rubiginosa, denique fusco-nigra, deterrentibus obsessis, vetustate rimosus, intus hinc inde rimosim excavatis, 2-3 cm. longis, 1-2 cm. latis, $\frac{1}{2}$ - $\frac{2}{3}$ cm. altis, textura fibroso-coriacea, fere suberosa vel daldiniacea, non zonata; peritheciis polystichis, marginem versus sæpe arcuatis, tubulosis vel elongatis, demum papillatim paulumque prominulis, vertice non pruinoso plicato-rugoso, ore vix visibili perforato, usque ad 1 $\frac{1}{2}$ mm. altis, $\frac{1}{3}$ mm. diam.; sporidiis fuscis, navicularibus, 12-17 \approx 9-10 e latere 5-7,5 μ . cr.

Hab. ad truncos, Gran Chaco, Tatarenda Boliviae. — *H. solidum* Berk., sporidiis diversum, *H. dubiosum* Speg., perithecorum dimensionibus præsertim divergens. An potius *Penzigiæ* sp., observante auctore?

4. **Hypoxylon multiforme** Fr. — Syll. I, pag. 363 — *H. granulorum* 4403 Bull. — var. *luxurians* Rehm, Ann. Myc. III (1905) p. 229, Ascom. exsicc. n. 1595. — Stromatibus late irregulariter effusis, undulato-rugosis, margine sæpe sterilibus, crassis, duris, superimpositis, nigris.

Hab. ad lignum putre betulinum, Falkenberg Bavarie (PLOSSEL, PAZSCHKE).

5. **Hypoxylon Pseudo-tubulina** Ces. — Syll. I, p. 364 — var. *macro-* 4404 *spermum* Theiss., Ann. Mycol. VI (1908) p. 346. — Peritheciis paucis, 3-6 in quoque stromate, globoso-angulatis; stromate intus albo, superficie valde verrucoso-scruposo; ostioli ob verrucas imperspicuis, mox areola delicatissima micante instructis, dein poro pertusis; ascis maximis, 200-240 \approx 14-17, pedicello 40-80 \approx 5-6; sporidiis elongato-fusoideis, utrinque angustato-obtusulis vel subapiculatis, opacis, gutta una magna vel biguttatis, 40-46 \approx 12-15.

Hab. ad cortices crassos in silva, Sao Leopoldo Brasiliæ. —

Differt a typo stromatibus minoribus sporidiisque multo majoribus. — Var. *macrostroma* Theiss., l. c. — Stromatibus sæpe majoribus, usque ad 6 mm. diam. vel pluribus connatis, gyroso-mammillatis, intus albis; peritheciis solidis, atris, globosis v. angulatis, parietibus crassis instructis, 500-800 μ . diam.; ascis 130-170 μ ., pedicello 60-90 μ . longo; sporidiis 30-38 \times 8-9. — Ad truncos, Sao Leopoldo. — *Hyp. cantareirensi* P. Henn. valde affine nisi identicum.

6. *Hypoxylon nucigenum* P. Henn., Hedwigia XLVII (1908) p. 259. 4405

— Stromatibus subgloboso-depressis, cinereo-fuscis v. nigricantibus, superficie subareolatis, conico-ostiolatis, intus pallidis dein atro-fuscis c. 2-2,5 cm. diam.; peritheciis angulato-ellipsoideis, lignosis, cinereo-fuscis, 5-7 mm. diam. (nuci Pini Cembræ similibus); ascis cylindraceis, 8-sporis, plerumque secedentibus; sporidiis oblique monostichis, oblonge navicularibus, utrinque obtuso-rotundatis, atris, 40-52 \times 10-13.

Hab. in truncis emortuis, Luzon, Prov. Bataan, Lamas River Ins. Philippin. (COPELAND).

7. *Hypoxylon Heinricherii* Bres., Ann. Mycol. V (1907) p. 241. — 4406

Stromatibus pulvinatis, 1 cm. circiter diam., fuscis, intus albis; peritheciis immersis, subglobosis, ostiolis emergentibus, papillatis, nigris præditis; ascis jam resorptis; sporidiis late obovatis e latere subdepressis, fuscis, 12-15 \times 7-9.

Hab. ad ramos corticatos in insula Java (HEINRICHER).

8. *Hypoxylon crassum* Mattiolo et Sacc., Ann. di Botan. VII (1908) 4407 p. 144 et in Il Ruwenzori (1909) Fungi p. 11, t. III, f. 6-8. —

Stromatibus superficialibus majusculis, e subgloboso hemisphæricis, basi leviter coarctatis, 2-3 cm. circiter latis, 0,7-1 cm. altis, carbonaceis, nigris, subopacis, superficie ob ostiola prominula mamilliosis, intus atro-fuligineis, suberosis, non stratosi; peritheciis densis, monostichis, immersis, levissime emergentibus, ovoideo-oblongis, deorsum conspicue acutatis, 1,5 mm. long., 0,5-0,8 mm. latis; ostiolis obtuso-papillatis, prominulis, centro pertusis; ascis cylindraceis octosporis, parte sporifera 105-120 \times 11-12; paraphysibus tenuissimis filiformibus; sporidiis monostichis, ellipsoideo-oblongis, leviter inæquilateralibus utrinque rotundatis, 16-18 \times 7, variantibus usque ad 20 \times 8-9, fuligineis.

Hab. in ramis emortuis in silva inter Bihunga (1920 m.) et Nakitava (2652 m.) Africae austr. — Affine *Hypoxylon majusculo* Cooke, sed differt colore jugiter nigro, peritheciis ostiolisque ma-

gis prominulis, sporidiis obtusis, etc. et *H. multiformi*, sed sporidia multo ampliora; ab *H. Buttneri* Henn., recedit stromate multo majore (nec tantum 1 mm. diam.) et sporidiis angustioribus et brevioribus, nec 16-35 \times 17.

9. *Hypoxylon apoense* P. Henn., Hedwigia XLVII (1908) p. 259. — 4408

Stromatibus hemisphaericis, atris, intus pallidis, rugulosis, opacis, ostiolis prominulis, 1,5-2,5 cm. diam.; peritheciis immersis, globulosis, 0,5-0,8 mm. diam.; ascis pedicellatis, cylindraceis, obtusis, p. spor. c. 140-160 \times 12-14, 8-sporis, paraphysatis; sporidiis oblique monostichis, oblonge navicularibus obtusis vel acutiusculis, 25-32 \times 8-12, atris.

Hab. in truncis emortuis, Mindanao Davao, Mt. Apo 2000 m. Ins. Philippin. (COPELAND).

10. *Hypoxylon congoense* Sacc., Myc. cong. novi, Ann. Myc. IV (1906) 4409

p. 76. — Late effusum, applanatum sed hypostromate pulvinato crassiusculo suffultum, intus et extus nigrum sed superficie pruina atro-purpurea conspersum, carbonaceum, peritheciis non vel vix emergentibus fere imperspicue tuberculosum; peritheciis densissime stipatis, verticaliter oblongo-cylindraceis, basi acutis, apice obtusis, 1,5 mm. altis, 0,5 mm. latis; ostiolis obsoletis; ascis . . . jam resorptis; sporidiis oblongis utrinque rotundatis, inæquilateris, 16-22 \times 8-9, atro-fuligineis.

Hab. ad cortices putres, Kisantu Afr. (J. GILLET). — Habitu *Hypoxylon atro-purpureum* fere æmulatur sed sporidiis duplo majoribus et peritheciolorum forma statim dignoscitur. Pertinet ad sect. *Placoxylon*.

11. *Hypoxylon albo-tectum* Rehm in Rehm et Rick, Broteria V (1906) 4410

p. 228. — Stromatibus per corticem erumpentibus, irregulariter expansis, 0,5-2 cm. lat., 1-1,5 mm. cr., atris; peritheciis monostiche aggregatis, ovoideis, 1 mm. diam., plerumque semiglobosis v. globosis, prominentibus, verrucosis, pruina crassa alba præter centrum obtectis, applanatis, tenuiter marginatis poroque minimo pertusis; ascis cylindraceis, longissimis, octosporis; sporidiis elliptico-navicularibus, 1-cellularibus, 2-guttatis, fuscis, strato mucoso tenui obductis, 9-14 \times 4, monostichis; paraphysibus filiformibus.

Hab. ad ramulum putrem, Torres Vedras Lusitaniæ. — Pruina alba crassa, ut in *Hypox. Bovei*, mox dignoscenda species.

12. *Hypoxylon abyssinicum* Sacc. in Ann. Myc. X (1912) p. 312. — 4411

Effusum, superficiale, nigrum, carbonaceum; peritheciis modo discretis et laxè coherentibus, globosis, magnis, 2 mm. diam., di-

stincte acute papillatis, modo et multo frequentius 2-6 in soros intermixtos 3-5 mm. diam., alte pulvinatos coalescentibus et ostiolis totidem similibus signatis; ascis cylindricis sensim pedicellatis, apice rotundatis, 150-160 \times 8-10, octosporis, paraphysatis; sporidiis oblique monostichis, oblongo-fusoideis utrinque obtusulis, e latere navicularibus, 28-30 \times 7-9, fuligineis 1-2-guttatis.

Hab. in corticibus putrescentibus in Abyssinia, April 1904 (A. PAPPI). — Ab affini *Hyp. regali* Morg. — Syll. XVII, p. 610 — differt peritheciis majoribus, nunc discretis nunc discretis nunc 2-6-confluentibus, sporidiis paullo longioribus et angustioribus et patria omnino diversa. Pulcherrima species.

13. *Hypoxylon Sancto-Janianum* Ferd. et Winge, Botanisk Tidsskrift 4412 XXIX (1908) p. 14, tab. I, fig. 6. — Stromate superficiali, repando, 0,5 cm. lato, hinc inde obsolete rimoso, margine undulato-tumidulo, irregulari, distincte vero limitato, intus fuligineo-fusco, extus crusta ferruginea, ostiolis perithecorum obscurioribus punctata tecto, strato subperitheciali fibroso, textura fere daldiniacea instructo; crusta obtegente externe modo ferruginea, interne autem vivide rubra, inter perithecia singula plus minusve profunde penetrante; peritheciis monostichis, densissime stipatis, tubulatis, usque ad 1 $\frac{3}{4}$ mm. long., $\frac{1}{3}$ mm. cr.; ostiolis levibus, crateriformiter pertusis, crusta obscurioribus eamque papillatim penetrantibus; ascis cylindraceutis (?); sporidiis ellipsoideo-subnavicularibus, utrinque rotundatis, e latere leviter compressis, 14,5-19 \times 7-8,5 pluriguttulatis, atro-fuscis.

Hab. in insula St. Jean Indiæ occ. (RAUNKIAER). — *Hypoxylon areolato* Starb. affinis species. E sect. *Placoxylon*.

14. *Hypoxylon paulistanum* Speg., Fungi Paul. Rev. Mus. La Plata 4413 t. XV, p. 19 (1908). — Stromatibus erumpenti-superficialibus subparvis pulvinulatis margine obtusis, primo levibus pallide lateritiis dein fuscis squarrulosis punctulatis peritheciis globoso-angulatis 120-150 μ . coriaccellis, immersis non v. vix prominulis; ascis cylindraceutis parce pseudoparaphysatis, 85-100 \times 14, octosporis; sporidiis ellipsoideo-cymbiformibus, monostichis, opace fuligineis, mediocribus, 20 \times 10, levibus.

Hab. in ramulis emortuis adhuc pendulis prope Sao Paulo Brasilia (USTERI). — Species *Hypoxylon fusco* (Pers.) Fr. peraffinis, ascis aparaphysatis sporisque majoribus distincta.

15. *Hypoxylon Hibisci* P. Henn., Hedwigia XLVII (1908) p. 259. — 4414 Stromatibus subgregarie erumpentibus superficialibus, hemisphae-

rico-pulvinatis v. subglobosis 0,5-1 cm. diam., rufo brunneis dein fuscis, opacis, vix ostiolatis, rugulosis, intus fuscis; peritheciis immersis globulosis; ascis cylindraceo-clavatis, pedicellatis 8-sporis, paraphysatis; sporidiis monostichis, ellipsoideis, obtusis, atris, 6-10 × 3,5-4.

Hab. in ramis siccis Hibisci Rosæ-sinensis, Manila Ins. Philipp. (MERRILL).

16. *Hypoxylon hæmatites* Lév. — Syll. IX, p. 559 — var. *macro-* 4415
sporum Theiss., Ann. Mycol. VI (1908) p. 345. — Differt a typo notis microscopicis et stromate basali fortius evoluto, in quo nidulant perithecia sæpe discreta; ascis 110-125 × 16-18, pedicello breviusculo 15-30 μ . longo; sporidiis ellipsoideis, obtusis, nigris, rarius subglobosis, 18-27 × 12-14.

Hab. ad truncos, Rio grande do Sul, Brasilia.

17. *Hypoxylon collabens* Theiss., Ann. Mycol. VI (1908) p. 346. — 4416
 Stromate juventute crasse pulvinato, placentiformi, rubigineo-brunneo, orbiculari v. oblongo, 1 1/2 cm. lato, 4-8 mm. alto, levi, haud nitente, maturitate collabente, multo tenuiore, nigrescente; peritheciis emergentibus submammillatis ostiolisque acutis conicis superficiem asperam reddentibus, stipatis, elliptico-globosis, 800 μ . diam. usque ad 1 mm. altis, duris; ascis jam evanidis; sporidiis badiis 18-22 × 6 1/2-9, hinc obtusis illinc acutis.

Hab. ad cortices in silva, Sao Leopoldo (J. Rick S. J.).

18. *Hypoxylon Kermesi* Speg., An. Mus. Nac. Buenos Aires t. XIX 4417
 (1909) p. 343. — Stromatibus superficialibus subgloboso-depressis v. sublenticularibus, extus aurantiacis dense majusculæque nigro-ostiolatis, intus concoloribus dense perithecigeris; peritheciis densissime constipatis, ellipsoideo-obovatis, apice late ostiolato-perforatis, carbonaceis nigerrimis 300-400 × 200-300; ascis mox diffluentibus; sporidiis senescentibus navicularibus opace fuligineis, 12-16 × 5-9.

Hab. ad cortices truncorum putrescentium in silvis prope Formosa, Rep. Argentina Amer. austr.

19. *Hypoxylon rubiginosum* (Pers.) Fr. — Syll. I, p. 376 — var. *in-* 4418
signe Rehm in Strasser, Verh. zool.-bot. Ges. Wien, LVII (1907) p. 323. — A typo differt ascis majoribus (p. sp. usque 120 long.) sporidiis etiam majoribus 20-24 (usque ad 38) × 10-12.

Hab. in ligno sicco fagineo, Sonntagberg Austriæ inf. (P. LAMBERT). — Var. *microcarpum* Speg. An. Mus. Nac. Buenos Aires t. XVII (1908) p. 120. — A typo differt peritheciis dense con-

stipatis ac conspicue minoribus 100-110 μ . diam. — Ad ramos dejectos subputrescentes *Ilicis paraguariensis* in silvis circ. San Pedro Argentina Amer. austr.

20. *Hypoxylon pulcherrimum* v. Höhn., Ann. Myc. III (1905) p. 187. 4419

— Ita vocandum *Hypoxylon coccineum* Bull. v. *microcarpum* Bizz. (Syll. IX, p. 545) quod, sec. v. Höhn., ut bona species habendum. *Hypox. microcarpum* Penz. et Sacc. est quoque diversum.

21. *Hypoxylon diatrypeoides* Rehm, Ann. Mycol. V (1907) p. 525. — 4420

Stromatibus ab initio cortice innatis ab eoque rubro-stromatico subtectis, prominentibus, dein prorumpentibus, irregulariter orbicularibus, gregariis, demum cortice secedente fere sessilibus, semiglobosis, 1-4 mm. diam., extus rubro-fuscidulis, ca. 2 mm. altis, subcarnosis, intus rubescentibus, glabris; peritheciis globulosis 5-30 innatis, membranaceis fuscidulo-contextis, monostichis, ca. 0,4 mm. diam., semiglobosis demum prominentibus, interdum fere gregarie exstantibus, rarissime papillulatis, poro conspicuo impresso albido-marginato pertusis; ascis cylindraceis, apice rotundatis, 100-110 \times 15-17, octosporis; sporidiis ellipsoideis, rectis vel subcurvatis, violaceo-fuscis, 18-20 \times 8, monostichis; paraphysibus ramosis, septatis, 3 μ . cr., gelatinosis.

Hab. ad truncos, Sao Paulo, Brasilia (USTERR). — Stromatibus molliusculis ad Hypocreaceas vergit, habitu vero *Diatrypen* in memoriam revocat.

22. *Hypoxylon ? valsarioides* Speg., Fungi Chilenses (1910) pag. 48, 4421

cum icon. — Stromatibus cortice innato-erumpentibus parvis superne planiusculis levibus, extus fusco-atris, intus aurantio-lateritiis; peritheciis majusculis globosis paucis constipatis substantia stromatica junctis, carbonaceis nigris, obsolete ostiolatis, 1-1,3 mm. diam.; ascis linearibus longe pedicellatis paraphysatis octosporis, 200 \times 5-6; sporidiis monostichis cylindraceo-ellipsoideis grosse uniguttulatis fuliginis, 12 \times 4.

Hab. ad ramos emortuos *Perseæ Lingue* prope Ciudad de Valdivia, Chile Amer. austr. — Huc pertinet verisimiliter *Hyp. rubricosum* Montagne nec Fries.

23. *Hypoxylon Dieckmannii* Theiss., Ann. Mycol. VI (1908) p. 346. 4422

— Stromatibus pulvinatis, discretis, 1-4 mm. diam. vel undulato-confluentibus, 1-2 mm. altis, margine rotundato, initio purpureo-brunneis, dein decolorantibus fusco-atris vel definite atris, haud nitentibus, sub lente pulveraceo-rugosulis, ostioliis minutissimis pertusis non vel vix emergentibus, poro centrali flavido sub lente

forti solum visibili, intus carbonaceo-duris, ætate fuligineo-pulveraceis; peritheciis stipatis, immersis, ovato-ellipticis, $600 \approx 200$, collo brevi superficiem attingentibus; ascis, non visis; sporidiis oblongo-ellipticis, utrinque rotundatis, fuscis, demum brunnescentibus, initio biguttulatis, $7-9 \approx 3-4 \frac{1}{2}$.

Hab. in cortice duro in silva, Sao Leopoldo, Brasilia.

24. *Hypoxylon glomerulatum* Theiss., Ann. Mycol. VI (1908) p. 345. — 4423

Peritheciis minutis 300-700 μ . diam. singulis v. paucis aggregatis v. in pulvinulos discretos 3-5 mm. latos stromate parvissimo interjecto confluentibus, primo furfure testaceo-purpureo conspersis, dein nigrescentibus, vertice prominulis, umbilicatis, ostiolo nigro punctiformi dein pertuso; ascis magnis 100-130 \approx 12-15, pedicello firmo usque ad 40 μ . longo; sporidiis octonis, plano-convexis, rarius recte ellipsoideis, utrinque rotundatis vel subapiculatis, atherimis, grosse guttatis, 18-23 \approx 10-12.

Hab. ad ramulos exsiccatos in silvulis («capao» dictis), Sao Leopoldo Brasilia. — Ab *Hyp. rubello* Penz. et Sacc. sporidiis latioribus nec fusoides nec acutis dignoscenda species.

25. *Hypoxylon pumilio* Sacc et Fairm. in Saccardo Micromycet. A- 4424

mer. novi, Journ. of Myc. XII (1906) p. 47. — Minutum, extus e roseo isabellinum, breviter effusum, rarius in acervulos exiguos 1 mm. latos limitatum, plerumque 4-6 mm. long., 2 mm. lat., applanatum v. vix convexulum; peritheciis unistratosi perexiguis, globulosis vix 200 μ . diam.; medietate superiori discretis, hinc prominulis, extus tenuiter roseo-pruinosis, intus nigris, ostiolo brevissimo lato obtuso, minutissime pertuso, fere deterso hinc nigricante, 90-100 μ . diam.; ascis cylindricis deorsum sensim tenuato-stipitatis, apice rotundatis, 130 \approx 6-8, parte sporif. 70-80 μ . longa, octosporis; paraphysibus filiformibus ascos multo superantibus; sporidiis oblique monostichis, ovato-oblongis, inæquilateris, 12-14 \approx 5,5-6, fuligineis, crasse 2 guttatis, rarius guttulis inæqualibus 3-4 fœtis.

Hab. in ligno putri in silvis pr. Lyndonville, New York, Amer. bor. — Nonnihil affine *H. nectrioideo* Sacc. et Trotter et *H. nectrioidi* Speg. a quibus mox dignoscitur peritheciis applanato-effusis, multo minoribus. Stroma, cui perithecia innituntur est maculiforme, pariter roseo-isabellinum. Species pertinet ad subgenus *Placoxylon*, Sect. a.

26. *Hypoxylon rubigineo-areolatum* Rehm in Theiss., Ann. Mycol. VI 4425 (1908) p. 345. — Æqualiter longe lateque effusum, 1-1 $\frac{1}{2}$ mm.

crassum, vel in glebas dissolutum, primo fusco-crocatum, dein rubigineo-purpureum vel atro-violaceum, ætate nigrescens; peritheciis 500-800 μ . diam. vertice subdepresso delicate papillato, disco interdum applanatulo, anulum minutum efformante; ascis p. sp. 90-115 \times 6-7, pedicello 40-60 μ . longo; sporidiis inter 12-17 \times 5-7 variantibus, oblongis vel plus minus ellipticis, forma inconstanti, rectis curvulisve, 1-2 guttatis, badiis.

Hab. ad ligna emortua corticata et decorticata, Sao Leopoldo, Brasilia. — Species variabilitate omnium fere partium memorabilis. Forma α : Perithecia ad superficiem stromatis non prominula [tota superficie æqualiter plana apparenter compressa] sed angulato-polygonaliter circumscripta; hinc superficies reticulato-areolata. Forma β : Perithecia supra breviter libera regulariter rotundata; hinc superficies æqualiter colliculosa. Forma γ : sicut β , sed papilla annulo distincto circumdata. — Etiam sporidia mox 12-14, mox 13-17 vel 12-17 μ . longa inveniuntur. *Hyp. janthino* Cooke affine. — Var. *microsporum* Theiss., l. c. — Differt a typo ascis 60-70 μ . longis, sporidiis fuliginis 9-11 \times 4,5. — Cum typo.

27. *Hypoxylon amaniense* P. Henn., Engl. Jahrb. XXXVIII (1905) 4426 p. 115. — Stromatibus hemisphærico- v. oblongo-pulvinatis, atro-carbonaceis, favoso-rugulosis, 6-12 mm. diam., loculis ellipsoideis v. ovoideis, 400-500 \times 300-350, ostiolis umbilicatis; ascis cylindraceis, 5-5,5 μ . cr., paraphysatis; sporidiis 8 oblique monostichis, longe fusoides, inæquilateralibus, fusco-atris, 18-22 \times 4-5,5.

Hab. in ligno, Amani Ost-Usambara Africæ centr. (EICHELBAUM). — *Hyph. annulato* Schw. affine, sed stromatibus hemisphæricis, sporidiis angustis elongatis diversum.

28. *Hypoxylon rosellinoides* P. Henn., Engl. Jahrb. XXXVIII (1905) 4427 p. 115. — Stromatibus ovoideis v. hemisphæricis pulvinatis, carbonaceo-atris, rugulosis, 1- v. plurimis conico-ostiolatis, 1-2 mm. diam., 1- v. plurilocularibus, loculis subglobosis immersis; ascis cylindraceis c. 200 \times 10-15, paraphysatis; octosporis; sporidiis oblique monostichis fusideo-navicularibus, atris, 20-28 \times 10-13.

Hab. in ramis corticatis prope Amani Ost-Usambara Africæ centr. (EICHELBAUM).

29. *Hypoxylon epimyces* Speg. An. Mus. Nac. Buenos Aires t. XIX 4428 (1909) p. 344. — Euhypoxylon; stromatibus laxè gregariis superficialibus lenticularibus parvis punctato-verruculosis nigris opacis glabris, intus farctis suberosis albis; peritheciis dense constipatis periphericis, immersis, globosis, minutis, 200-250 μ . diam.; ascis

cylindraceis aparaphysatis, octosporis, $50 \approx 4-5$; sporidiis ellipsoideo-subnavicularibus, levibus, pallide fuligineis, grosse uniguttulatis $5-7 \approx 2-3$.

Hab. ad pileos Trametis fibrosæ in silvis prope Formosa Argentina Amer. austr.

30. *Hypoxylon minutellum* Syd., Ann. Mycol. VIII (1910) p. 37. — 4429

Stromatibus superficialibus rotundatis, applanatis, 3-8 mm. latis, 2-3 mm. crassis, centro affixis, atris, rugulosis; peritheciis ca. 20-50 in disco stromatis immersis, ostioliis prominulis; ascis cylindraceis, mox diffluentibus; sporidiis elliptico-navicularibus, fusco-brunneis, continuis, $6-7 \frac{1}{2} \approx 3-3 \frac{1}{2}$.

Hab. ad corticem, Pauai alt. 2100 m., in provincia Benguet, Luzon, insul. Philipp. (R. C. Mc GREGOR).

31. *Hypoxylon Berterii* Mont. — Syll. I, p. 367 — var. *microstroma* 4430

Theiss., Ann. Mycol. VI (1908) p. 345. — A typo differt stromatibus minoribus lentiformibus 1-4 mm. diam. orbicularibus v. ellipticis, $1-1 \frac{1}{2}$ mm. altis; ascis 60-70 μ . longis, pedicello usque ad 50 μ . longo; sporidiis opacis obtusulis $11-13 \approx 5-6 \frac{1}{2}$ sæpe irregulariter in asco sparsis.

Hab. ad truncos, Rio Grande do Sul Brasiliæ. — Affinia sunt *Hyp. Dussianum* Pat., *Hyp. cohærens* var. *brasiliense* Starb. et *Hyp. leucocreas* B. et Rav.

32. *Hypoxylon Gilletianum* Sacc., Myc. Cong. novi, Ann. Myc. IV 4431

(1906) p. 76. — Stromatibus e globoso hemisphæricis, superficialibus, hinc inde congregatis, non vel vix confluentibus, 6-8 mm. diam., intus extusque opace nigricantibus, carbonaceis, superficie ob perithecia prominula minute colliculosis; peritheciis globosis, 0,5-0,6 mm. diam., ostioliis punctiformibus areola circulari depresso, 200-300 μ . diam. nitidula cinctis; ascis . . . jam resorptis; sporidiis navicularibus, inæquilateris, utrinque acutiusculis, $19-21 \approx 6-7$, atro-fuligineis.

Hab. in corticibus emortuis, Kisantu, Africæ (J. GILLET). — Ab *Hypoxylo marginato*, *H. annulato* aliisque speciebus areolato-impressis differt stromatis forma et sporidiis multo majoribus; ab *Hyp. malleolo* stromate multo minore.

33. *Hypoxylon Kellermani* Rehm, Ann. Mycol. VI (1908) p. 313. — 4432

Stromatibus in ligno denudato tuberculariformiter sessilibus, semiglobosis, versus basim constrictis, apice plus minusve truncatis, orbicularibus, glabris, nigris, intus albis, 1-3 mm. diam., 1-1,5 mm. altis, carbonaceis; peritheciis usque ad 12 monostiche innatis,

0,3 mm. diam., papillula minima conoidea prominente; ascis evanidis; sporidiis unicellularibus, subfuscis, $18-20 \times 10-12$.

Hab. ad ramos decorticatos, Columbus Ohio U. St. Amer. bor. (KELLERMAN). — Ab *Hypoxylo atro-rufa* sporidiis amplioribus imprimis recedit.

34. *Hypoxylon lilliputianum* Syd., Ann. Myc. VIII (1910) p. 37. — 4433

Stromatibus gregariis, rotundatis, ca. 1-3 mm. latis, 1 mm. crassis, primo fusco-brunneis, tandem atris, intus albis, rugulosis; peritheciis ca. 5-25 in disco stromatis immersis, ostioliis prominulis; ascis cylindraceis p. sp. $20-30 \times 3-3\frac{1}{2}$, octosporis; sporidiis ellipsoideis, 1-guttulatis, utrinque obtusis, continuis, fuscis, $3\frac{1}{2}-5 \times 2$.

Hab. ad lignum cariosum, Davao, Mindanao in ins. Philippinensibus (E. B. COPELAND).

KRETZSCHMARIA Fr. Syll. IX p. 565, XI p. 287, XIV p. 512, XVI p. 449, XVII p. 614.

1. *Kretzschmaria rugosa* Earle, Bull. of the New York Bot. Gard. 4434

(1904) p. 311. — Stromatibus usque ad 1 cm. lat., irregulariter globosis v. subdepressis, breviter stipitatis v. subsessilibus, superficie pallide nigra, rugosa, contextu spongioso-fibroso, albo, stipite $2-8 \times 1-2$ mm.; peritheciis latis, 1 mm. diam., nigris, globosis, infossis sed prominentibus, monostichis, sparsis, non confertis, ostiolo minuto, punctiformi, inconspicuo præditis; ascis cylindraceis, $150-200 \times 8-10$, evanescentibus; paraphysibus tenuibus, filiformibus, 1 μ . cr.; sporidiis monostichis, inæquilateralibus, sæpe curvis, primam hyalinis 1- v. 2-guttulatis, dein brunneis, opacis, $25-28 \times 8-10$.

Hab. in trunco emortuo in silvis, Molyneaux Estote, Isl. of St. Kitts Amer. bor. (BRITTON et COWELL).

2. *Kretzschmaria stilbophora* Rehm, Ann. Mycol. V (1907) p. 526. 4435

— Stromate communi late expanso, nigrescente, stilbophoro, crustaceo-membranaceo; stromatibus singularibus arcte congregatis, fere crustaceis, verticaliter constipatis et conglutinatis, obconicis, deorsum angustatis denigratisque, superne convexiusculis, centro papillulatis, primitus strato pruinoso cinereo-argenteo demum deciduo obductis, dein atris carbonaceis, 1 mm. alt., 0,7-0,9 mm. lat.; peritheciis oblongis, c. 250 μ . long.; ascis cylindraceis, perlongis, 8-sporis; sporidiis ellipsoideis, subnavicularibus, 1-cellularibus, fuscis, $10-12 \times 5$, monostichis; paraphysibus filiformibus.

Hab. ad ramum arboris frondosæ, Sao Leopoldo, Rio grande do Sul, Brasilia (RICK S. J.). Stilbum elongatum epistromaticum,

facile deciduum, a cl. Rick observatum, sed a cl. Rehm non amplius repertum.

3. *Kretzschmaria mauritanica* (Dur. et Mont.) Pat., Bull. Soc. Myc. 4436 Fr. XXI (1905) p. 120. — Ita vocanda est *Sphaeria mauritanica* Dur. et Mont. seu *Hypoxylon mauritanicum* Dur. et Mont. — Syll. I, p. 371.

XYLOCREA A. Möll. — Syll. XVI p. 451.

1. *Xylocrea elegantissima* Rick, Broteria V (1906) p. 51. — Stro- 4437
mate carnosissimo, intus albo, extus albo-stramineo, 0,5 cm. diam., globoso, subsessili; peritheciis atris, oblongo-ovatis, 1-2 mm. diam., eminentibus cinctis disco denigrato stromatis, inter se separatis spatii 1-3 mm. v. etiam approximatis, aliquoties fere superficialibus; ascis 250 × 14, pedicellatis; sporidiis limoniformibus 25 × 12, versus apicem acutis, longitudinaliter striatis, primitus hyalinis, dein guttulatis, atro-brunneis.

Hab. ad gramina adusta, Rio grande do Sul Brasiliæ. — For-
san non bene distinctum ab *Hypoxylo Phœnice* (Fr.) Berk. et Curt.

PENZIGIA Sacc. — Syll. IX p. 567, XIV p. 513, XVI p. 451.

1. *Penzigia Arntzenii* Theiss., Ann. Mycol. VI (1908) pag. 346. — 4438
Stromatibus minutis, opacis, orbicularibus, 1 mm. diam., depresso-globosis, subtus coarctatis, puncto centrali affixis (pseudo-stipite in sectione verticali distincte visibili), 500-700 μ . altis, mollibus, hypocreaceis, intus farctis candidis, extus brunneis haud nitentibus, sub lente ruguloso-granulosis ostioli paucis nigris vix perspicuis, cortice non duro; peritheciis periphericis, monostichis, immersis, sparsis, minutissimis, 150 μ . diam.; ascis cylindræis, octosporis, obtuse rotundatis, breviter pedicellatis, apophysatis, p. sp. 160-210 × 17-21, dilutis; sporidiis atris, continuis, late ellipticis, utrinque acutatis v. rotundioribus, gutta una magna præditis, 30-35 × 12-15.

Hab. ad ramulos siccos plantæ scandentis in silva, Sao Leopoldo Brasiliæ. — Ab *Engleromycete* differt peritheciis monostichis, ascis apophysatis et cortice non duro. Ab *Hyp. quisquiliarum* Mont. et *Hyp. chionostomo* Speg. omnino diversum. An huc pertineat *Hyp. paucillum* Ces., dubium est. — E sect. *Sarcoxylo*.

2. *Penzigia Schiffereri* v. Höhn., Fragm. Mykol. VII (1909) in Sitzb. 4439
k. Ak. d. Wissensch. Wien, CXVIII Abt. I, p. 827. — Stromatibus sessilibus, depresso-globosis, basi contractis, 27 mm. latis, 13

mm. altis, sordide brunneis senioribus nigricantibus, opacis, levibus; crustis fragilibus, carbonaceis, 350-450 μ . cr., extus regulariter reticulatis; ostioliis minutis, hemisphaericis, in verrucis minutis depressis insidentibus; peritheciis ovoideo-angulosis, fragilibus, 2 mm. altis, 1,8 mm. latis, nigris; contextu stromatico molli, spongioso radiatim fibroso, non stratoso v. zonato; ascis et paraphysibus solutis; sporidiis nigris, opacis, cylindraceo-fusoideis, apice acutis v. obtusulis, rectis v. curvulis, 26-36 \times 6,5-9.

Hab. in ligno putri Batavia in ins. Java. — *Penz. compunctæ* (Jung.) et *P. fusco-areolatae* Rehm affinis.

3. *Penzigia fusco-areolata* Rehm, Ann. Mycol. V (1907) p. 527. — 4440
Stromatibus hemisphaericis vel oblongis, sessilibus, depressis, brevissime stipitatis, stipite 1-2 mm. long. et cr., integris, nec lobulatis, nec undulatis, glabris, extus subfuscis, supera parte lineolis atris tenuissimis areolata, 1-1,5 cm. diam., 0,7 cm. altis, subcarbonaceis; peritheciis in stromatis superiore parte nigris, 1 mm. altis, monostichis, globulosis, in quaque areola papillula 1-2 conoidea, atra prominente, poro perspicuo pertusis; stromate intus albo, stratoso fibroso; ascis cylindraceis, octosporis; sporidiis fusiformibus, plerumque subnavicularibus, 1-cellularibus, fuscis, monostichis, 12 \times 5.

Hab. ad lignum putridum, Sao Leopoldo, Rio grande do Sul, Brasilia (Rick S. J.). — Affinis *P. compunctæ* sed minutie stromatis omnino distincta.

4. *Penzigia Polyporus* Starb., Ascom. Schwed. Chaco-Cordill. Exp., 4441
Arkiv f. Bot. Bd. V (1905) p. 32, fig. 24. — Stromatibus pileatis, polyporoideis, applanatis, laccatim nigro-cuticulatis, concentricè sulcatis, centro tuberculatim affixis vel latius matrice adnatis, margine acutiusculo, pulvinatis, undulatim inæqualibus, fusco-furfuraceis, ambitu paullum lobatis, 2-5 cm. diam., circa 1 cm. crassis (specimen maximum 5,5 \times 3,5 \times 1 cm.), textura stratus corticalis carbonacea, intus suberosa, radiante, sericeo-nitida; peritheciis monostichis, cylindraceo-elongatis, mutua pressione angulatis, non prominulis, vix ostiolatis, carbonaceis, circ. 1 mm. altis, $\frac{1}{4}$ mm. diam.; ascis resorptis; sporidiis ellipsoideis, inæquilateralibus plerumque biguttulatis, 7,5-13 \times 3,8-5.

Hab. in trunco humi jacente, pr. Laguna de la Brea, prov. Jujuy, Argentina. — Species perpulchra ad instar Sterei vel Polypori resupinati pileata, textura intus suberosa, radiante, sericeo-nitente, non zonata, recte *Penzigia* adscribenda.

5. *Penzigia seriata* Theiss., Ann. Mycol. VI (1908) p. 347. — Stro- 4442
matibus caespitose erumpentibus, in pulvinulos exquisite lobatos
confluentibus, 1 cm. circ. diam. vel seriatim dispositis, serie sim-
plici ex stromatibus 10-25 composita v. binis parallelis; stromatibus
seriatis, mutua pressione e latere compressis, 2 mm. altis, 3 mm.
diam., a latere 1-1 1/2 mm., deorsum ad modum stipitis attenuatis
v. margine involuto distincte licet brevissime stipitatis; extus pri-
mo coccineo-rubiginéis, dein brunnescentibus vel fere nigris, pul-
verulentis, levibus, cuticula et contextu molliusculis, intus fusco-
fuliginéis; peritheciis periphericis, monostichis, immersis, globosis,
minutis, stipatis, ostioliis ætate demum sub lente mammillose ni-
gro-prominulis; ascis cylindraceutis, breviter pedicellatis, p. sp. 70-
90 \approx 6-7; sporidiis octonis, oblongis, monostichis, lætius fuliginéis,
guttis 2 specie septatis, 11-13 1/2 \approx 3 1/2-4 1/2.

Hab. ad cortices in silva, Petropolis Brasiliæ (J. Rick S. J.).
— Comparanda cum *Hyp. ceramichroo* B. et Br.

6. *Penzigia sessilis* Theiss., Ann. Mycol. VI (1908) p. 347. — Stroma- 4443
tibus sessilibus, depressis, atris, placentiformibus, 2-4 mm. d., 1-2
mm. altis, subtus coarctatis, modice confluentibus, cute dura car-
bonacea, intus primo albo-farctis, radiato-fibrosis, mox lignescen-
tibus ac demum erosio carbonaceis, superficie æquali, levi, opaca,
non nitida nec rugosa, ostioliis imperspicuis; peritheciis ovato-glo-
bosis, periphericis, monostichis, immersis, stipatis, 500-900 μ . diam.
carbonaceis; ascis dilutis, cylindraceutis, 140-170 μ . longis; sporidiis
opacis, utrinque acutis vel saltem angustatis, rectis vel plano-con-
vexis, inter 28-38 \approx 7-12 variantibus, typice 30-32 \approx 9-10.

Hab. ad lignum corticatum in silva Sao Leopoldo, Brasilia.

DALDINIA De Not. et Ces. — Syll. I p. 393, XI p. 288, XVI p. 449,
XVII p. 616.

1. *Daldinia corrugata* Pat. et Har., Bull. Soc. Myc. Fr. XXII (1906) 4444
p. 120. — Minuta 5-10 mm. lata (rarius 20 mm.), gregaria; stromate
subgloboso, brunneo-atro, carbonaceo, glabro, superficie plicato-
corrugata, ostioliis vix punctato, intus albido zonis concentricis
brunneis numerosis notato, crustula tenui, atra insidente; perithe-
ciis periphericis immersis, ovoideis; sporidiis ellipsoideis, fuliginéis,
rectis, 9 \approx 4.

Hab. ad lignum in Africa orientali (Herb. Mus. Paris.).

2. *Daldinia platensis* Speg., An. Mus. Nac. Buenos Aires t. XIX 4445
(1909) p. 345. — Stromatibus hinc inde laxè gregariis subhemi-

sphaericis 1-2 cm. diam., 6-7,5 mm. alt., duris carbonaceis, atris opacis levibus v. vix colliculosis, intus dense concentrice crassiusculeque septatis, interstitiis medulla fibrillosa cinerea repletis; peritheciis periphericis dense constipatis non prominulis obsoletissime minutissimeque papillato-ostiolatis, obpiriformibus 0,75 mm. alt., 0,50 mm. diam., nigris, coriacellis; ascis cylindraceis longissime pedicellatis, paraphysatis, 170-200 \times 8; sporidiis navicularibus 8-10 \times 5, non v. minute biguttulatis, fuliginis.

Hab. ad truncos dejectos putrescentes in umbrosis Parque de La Plata Rep. Argentina, Amer. austr. — *Dald. concentrica* affinis, sporidiis minoribus notisque nonnullis aliis distincta videtur.

3. *Daldinia granulosa* Speg., An. Mus. Nac. Buenos Aires t. XIX 4446 (1909) p. 345. — Solitaria v. hinc inde subcæspitosa, nigra; clavulis e cylindraceo clavulatis 1,5-4 cm. long., 8-12 mm. diam., apice obtusis ubique fertilibus, dense minuteque granulosi, stipite glabro; peritheciis globulosis 400-600 μ . diam., carbonaceis obsoletissime ostiolatis; ascis cylindraceis mox diffluentibus; sporidiis eximie navicularibus, 8-11 \times 6, opace fuliginis.

Hab. ad truncos putridos in silvis secus Rio Pescado, Jujuy Rep. Argentina Amer. austr.

4. *Daldinia argentinensis* Speg. — Syll. XVII, p. 616 — var. *sessilis* 4447 Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 345. — A typo stipitis defectu recedit.

Hab. ad ramos dejectos putrescentes in silvis secus Rio Pescado Argentina Amer. austr.

5. *Daldinia barbata* Rick, Broteria V (1906) p. 50. — Stromate pulvinato, usque ad 5 cm. diam., sæpe lateraliter ad modum *Fomitis* protracto, ferrugineo-purpureo, pruinato; ascis pedicellatis, parte spor. 50 \times 6; sporidiis atro-fuliginis, curvulis, 10 \times 4, uniseriatis, paraphysibus filiformibus.

Hab. ad truncos Rio grande do Sul Brasiliæ. — Exsiccando et jam in statu naturali tegitur totus fungus filamentis multis atris, longissimis, ex sporarum massa formati, hinc barbatus.

6. *Daldinia stratosata* Sacc. Ita nuncupandum *Hypoxyylon stratosum* Sacc. — Syll. IX, pag. 544 — a *Daldinia Escholtzii* (Ehrenb.) Rehm — Syll. XVII, p. 617 — præsertim sporidiis fere dimidio angustioribus distinguendum.

NUMMULARIA Tul. — Syll. I p. 395, IX p. 569, XI p. 288, XIV p. 513, XVI p. 1129, XVII p. 618. — Teste P. Theissen in Ann.

Mycol. VI p. 92 (1908) *Diatrypeopsis saccata* Speg. — Syll. IX, p. 480 — collidit cum *Nummularia punctulata* (B. et Br.) Sacc.

1. *Nummularia philippinensis* Ricker, A List Philipp. Fungi in Phil. Journ. of Science, I, Suppl. IV (1906) p. 280. — Stromate primum epidermide tecto sed mox erumpenti et libero, convexo, oblongo-ovato, nigro, 4-6 \approx 1,5-2,5 cm.; peritheciis cylindricis, nigris, arcte stipatis, 1,5 mm. circ. alt.; ascis cylindraceis, 170-185 \approx 12-15; sporidiis monostichis, ellipsoideo-oblongis, primum subhyalinis sed mox opacis, 25-28 \approx 11-14. 4449

Hab. in ligno humifuso, Luzon, Prov. Bataan, Lamao, in ins. Philippin. (MERRILL).

2. *Nummularia Artocarpi* Pat., Bull. Soc. Myc. France XXII (1906) p. 56. — Stromate peridermio nigricante emergente fere superficiali liberoque, orbiculari, 3-8 mm. diam., 1-2 mm. cr., plano v. depresso, obtuse marginato, inferne attenuato, brunneo-atro, intus albo; peritheciis stromate immersis, numerosis, monostichis, ovoideis, ostiolis poro angusto pertusis haud prominentibus; ascis cylindraceis, stipitatis, 8-sporis, parte spor. 75 \approx 8, filiformi-paraphysatis; sporidiis brunneis, ovoideis, simplicibus, sæpe inæquilateralibus, biguttulatis, 10-12 \approx 5-6. 4450

Hab. in cortice *Artocarpi* speciei indeterminatæ in Polynesia. 4451

3. *Nummularia luteo-viridis* Kirschst., Verh. Bot. Ver. Brandenb. XLVIII (1906) pag. 58. — Stromatibus cortice immersis v. disco nitido nigro 2-3 mm. lato ex ostiolis asperato, erumpentibus, cortici arcte adnatis, globosis, piriformibus vel cuboideis 3 mm. altis, extus mycelio flavo-viridi vestitis, solitariis v. pluribus aggregatis; ligni superficie viridi-flava; peritheciis pluries seriatis, globosis v. piriformibus, sæpe ob mutuam pressionem irregularibus; ascis tenuibus, octosporis, cylindraceis, supra rotundatis, basi in pedicellum acutatis, 50 \approx 5; sporidiis late ellipsoideis, oblique monostichis vel irregulariter distichis, primum biguttulatis, unilocularibus, griseo-brunneis, 4-5 \approx 2; paraphysibus hyalinis, numerosissimis, filiformibus, guttulatis, ascos superantibus.

Hab. in ramis putrescentibus *Quercus* sp. prope Rathenow Germaniæ. — *N. lutea* (Alb. et Schw.) affinis sed magnitudine et stromatis structura diversa.

4. *Nummularia oospora* Vouaux, Bull. Soc. Mycol. Fr. XXVI (1910) p. 155. — Stromate basi ligno innato, peridermio immerso, disco erumpente, postea in ligno decorticato superficiali, orbiculari vel ovali, 5-10 mm. longo 2-3 mm. cr., toto nigro; disco cupulato 4452

ostiolisque peritheciorum punctulato; peritheciis numerosis, densissime stipatis fereque cylindricis; ostioliis brevibus, poro angusto pertusis, vix prominulis; ascis non visis; sporidiis late ovoideis, fuscis, opacis, $16 \approx 11$.

Hab. in ligno putrescente, Nouméa, Nova Caledonia (CACOT). 4453

— A *Num. macrospora* Pat. sporidiis multo minoribus distincta.

5. *Nummularia gracilentia* Syd., Ann. Mycol. VIII (1910) p. 37. — Stromatibus determinatis, orbicularibus, planis, immersis, $\frac{1}{2}$ -1 cm. diam., ca. $\frac{1}{2}$ mm. crassis, duris atris; peritheciis sphaeroideis, immersis, 200-250 μ . diam.; ostioliis minutissimis, punctiformibus, vix elevatis, atris; ascis cylindraceutis, p. sp. 40-50 \approx 3, octosporis; sporidiis monostichis, ellipsoideis vel inaequilateralibus, continuis, fuscis, 4-5 \approx 2 $\frac{1}{2}$ -3.

Hab. in ramis emortuis corticatis in silva Dumaguete, Cuernos 4454

Mts., Province of Negros oriental, Talumtum (A. D. E. ELMER).

6. *Nummularia asarcodes* Theiss, Ann. Mycol. VI (1908) p. 349. — Stromatibus applanatis tenuibus, vix 1 mm. crassis, irregulariter discreto-effusis, sinuosis, cortice arcte cinctis, margine recto, superficie primo griseis atro-punctatis, dein plumbeo-fuliginis nigrescentibus, sordide pulverulentis, ætate subnitentibus, ostioliis pertusis annulatis vix perspicuis, intus carbonaceo-duris; peritheciis oblongo-ellipsoideis, 700 \approx 300, stipatis; ascis p. sp. 80-90 \approx 6-7; sporidiis ellipticis, rotundatis, opacis, 11-13 $\frac{1}{2}$ \approx 6-6 $\frac{1}{2}$.

Hab. ad truncos vetustos corticatos, Sao Leopoldo Brasilie. — Secundum Rehm *N. Bulliardi* affinis, colore griseo-plumbeo tamen diversa; præterea differt stromatibus tenuibus applanatis sporidiisque minoribus.

7. *Nummularia Bulliardi* Tul. — Syll. I, p. 396 — *Nummularia anthracina* (Schw.) — Var. *tiliæcola* Rehm, Ann. Mycol. VII (1909) pag. 532. — Stromatibus emergentibus, cortice demum delapso primitus marginatis, 10-20 cm. long., 1-3 cm. latis, cinereo-nigris, versus marginem subalbidulis, subrugulosis, ostioliis minutissimis haud prominentibus punctulatis; ceterum ut in *N. Bulliardi*.

Hab. in truncis Tiliæ americanæ, Riverside Illinois Amer. bor. (E. T. et S. A. HARPER). — Var. *stenosperma* Theiss., Ann. Mycol. VI (1908) p. 350. — Irregulariter oblongo-effusa vel exsiccata interrupte sinuosa, aterrima pulverulenta, ostioliis pertusis minutis vix elevatis signata; ascis breviter pedicellatis p. sp. 65-85 \approx 6-7; sporidiis fusco-brunneis ellipticis 9-13 \approx 5-6 $\frac{1}{2}$. — Ad truncos in Brasilia.

8. *Nummularia cincta* Ferd. et Winge, Botanisk Tidsskr. XXIX 4456 (1908) p. 15, tab. II, fig. 1. — Stromate per corticem erumpente ejusque laciniis erectis arcte cincto, pulvinato vel placentiformi, margine angusto, tumidulo, circuito orbiculari v. parum elongato, 2-6 cm. (et ultra?) diam., 2-15 mm. cr., fusco, intus concolori, textura subcoriacea; peritheciis periphericis, monostichis, dense stipatis, cylindraceis v. subovoideis, circ. 1 mm. long., $\frac{1}{5}$ - $\frac{1}{2}$ mm. cr.; ostioliis minutissimis, oculo nudo vix conspicuis, discoideo-papillulatis, poro lato pertusis, in speciminibus vetustis oblitteratis; ascis lineari-cylindraceis, apice rotundatis, in pedicellum longissimum, fragilem leviter attenuatis, parte sp. 95-105 \approx 6-7, poro jodo cærulescente; sporidiis octonis, monostichis, ellipsoideis v. ellipsoideo-fusiformibus, verrucosis, 13-15 \approx 5-6,5, singulatim brunneolo tinctis, acervatis brunneis; paraphysibus validis, septatis, basi circ. 6 μ . cr., sursum leniter attenuatis, ascos longe superantibus.
- Hab.* ad ramos corticatos in insulis Hispaniola et St. Jan Indiae occ. (RAUNKIAER).

9. *Nummularia clypeus* (Schw.) Cooke — Syll. IX, p. 570 — var. 4457 *macrospora* Theiss., Ann. Mycol. VI (1908) p. 349. — Stromatibus discretis 3-8 mm. diam., convexo-planis vel latius confluentibus et magis applanatis, sæpe lineari-elongatis, nitentibus; ascis 140-165 \approx 10-12 p. sp.; sporidiis 22-28 \approx 10-12.

Hab. in truncis ramisque corticatis, Sao Leopoldo, Brasiliæ.

10. *Nummularia commixta* Rehm — Syll. XVII p. 618 — Var. ap- 4458 *planata* Theiss., Ann. Mycol. VI (1908) p. 35; VII (1909) p. 13. — Differt a typo stromatibus æqualiter applanatis non convexis, vix 600 μ . crassis, aterrimis, nitentibus, ostioliisque non impressis, superficiem æqualiter hemisphærice punctulantibus (sine fossulis); stromatibus 3-30 mm. diam.; ascis breviter pedicellatis p. sp. 200-220 \approx 10-12; sporidiis hyalinis utrinque attenuatis 25-32 \approx 7,5.

Hab. ad ligna dura corticata, Sao Leopoldo Brasiliæ. — Var. *minor* Rehm ap. Theiss. in Ann. myc. VII (1909) p. 13. — Differt stromatibus minoribus 3-10 mm. diam., absentia fossularum in disco sporidiisque minoribus 20-26 \approx 7-9, hyalinis. — Cum var. præcedente.

11. *Nummularia diatrypeoides* Rehm, Ann. Mycol. V (1907) p. 527. 4459 — Stromatibus gregariis, ramulum ambientibus, primitus innatis, dein per corticem erumpentibus ab eoque tenuiter marginatis, orbicularibus, rarissime oblongis, supra corticem exstantibus, in ligno linea nigra circumscriptis, sessilibus, planis, atris, carbonaceis,

2-3 mm. diam.; peritheciis c. 12 innatis, monostichis, globulosis, 0,3 mm., papillulis in stromatis superficie vix conspicuis; ascis subcylindraceis, tenerimis, c. $180 \approx 50$ octosporis; sporidiis ellipsoideis, 1-cellularibus, subfuscis, strato tenuissimo mucoso obductis, $35 \approx 20$, 1-2-stichis; paraphysibus filiformibus septatis, 5-6 μ . crassis.

Hab. ad ramum, Rio grande do Sul, Brasilia (Rick S. J.). —
Habitus omnino *Diatrypes*.

12. *Nummularia divergens* Theiss., Ann. Mycol. VI (1908) p. 349. — 4460

Stromatibus in ligno denigrato orbicularibus 4-10 mm. diam. vel irregulariter expansis, nigro-brunneis, convexo-planis, margine indistincto, vix 1 mm. crassis, superficie sub lente granuloso-asperulis, ostioliis hemisphæricis minutis sparse punctulatis, carbonaceo-duris; peritheciis minutis, stipatis, ovatis, durissimis; ascis non visis; sporidiis atris, continuis, urceolatis, hinc recte truncatis, illic rotundato-angustatis, appendicula hyalina præditis, irregulariter guttulatis, laciniis mucosis tectis, $17-23 \approx 6-8,5$.

Hab. ad truncos corticatos, Sao Leopoldo Brasiliæ.

13. *Nummularia dura* Ferd. et Winge, Botanisk Tidsskr. XXIX 4461

(1908) p. 15, tab. II, fig. 2. — Stromate per corticem erumpente, plano, supra superficiem corticis vix surgente, margine sterili, tecto, ambitu fere orbiculari, 1,5-3 cm. (et ultra?) diam., tenuissimo, intus extusque nigerrimo, glabro, foveolis irregulariter dispersis circ. 2-3 mm. diam. instructo, textura carbonacea, durissima, picem aridam in memoriam revocante; peritheciis monostichis, densissime constipatis, tubularibus, $\frac{3}{4}$ -1 mm. long., circ. $\frac{1}{8}$ mm. cr.; ostioliis pustuliformibus, minutissimis, lente sola conspicuis; ascis cylindraceis, apice rotundatis jodoque cærulescentibus, breviter pedicellatis, parte sp. $125-135 \approx 7,5-8$; sporidiis octonis, monostichis, e dorso oblongo-ellipsoideis v. ellipsoideo-fusoideis, e latere inæquilateralibus v. navicularibus, nonnullis subcurvatis, $18-22 \approx 6,5-7,5$, pellucido-fusculis; paraphysibus filiformibus, longis, sursum attenuatis, guttulatis.

Hab. ad lignum corticatum arborum in insulis St. Croix et St. Thomas Indiæ occ. (Raunkiaer).

14. *Nummularia Fuckelia* Theiss., Ann. Mycol. VI (1908) p. 350. — 4462

Stromatibus erumpentibus, primo cortice cinctis, dein subsuperficialibus pulvinato-liberis, orbicularibus, 2-6 mm. diam., $1-1\frac{1}{2}$ mm. crassis, margine fusco oblique adscendente, disco atro rotundato-applanato vel obsolete marginato, levi, vix sub lente ostioliis cre-

berrimis annulatis minutissimis notato; peritheciis stipatissimis, ovato-angulatis, durissimis, 200-300 μ . diam.; ascis p. sp. 95-110 \approx 6; sporidiis hyalinis utrinque acutis, rectis vel plano-convexis, 12-15 \approx 5-5 $\frac{1}{2}$.

Hab. ad cortices, Sao Leopoldo Brasiliæ. — Ad gen. *Anthostoma* quoque vergit. Ubi sporidia jugiter hyalina, vix *Nummularice* species.

15. *Nummularia maculata* Theiss., Ann. Mycol. VI (1908) p. 348. — 4463

Stromatibus determinatis, orbicularibus vel plus minus irregulariter ellipticis, rarius confluentibus, 3-15 mm. diam., rarissime lineari-elongatis, planis vix pulvinatis, $\frac{1}{2}$ -1 mm. cr., primo griseis, dein fusco-griseis, maculis orbicularibus nigro-pulveraceis, ætate confluentibus conspersis, margine nigro acutiusculo, intus primo cinereis, ætate atris, non duris; peritheciis oblongo-cylindricis cum ovalibus mixtis, ostiolis in mediis maculis sitis, pertusis, minimis; ascis cylindraceis p. sp. 45-58 \approx 3 $\frac{1}{2}$ -4, pedicello 30-90 longo μ .; sporidiis griseo-fuscellis oblongis, biguttulatis, rotundatis 5 $\frac{1}{2}$ -7 \approx 2-2 $\frac{1}{2}$.

Hab. in ligno emortuo corticato, Sao Leopoldo, Brasilia. — Affinis *N. Møllerianæ* P. Henn.

16. *Nummularia punctato-brunnea* Theiss., Ann. Mycol. VI (1908) 4464

p. 348. — Stromatibus orbicularibus vel plus minus irregulariter ellipticis, subpulvinatis vel planis, 2-8 mm. diam. $\frac{1}{2}$ -1 mm. cr., margine indistincto sterili, superficie testacea, ætate sordide brunnea v. nigrescente, ostiolis atris, punctiformibus vix elevatis, pertusis picta, intus atris, non duris; peritheciis immersis ovalibus 500-700 μ . diam.; ascis p. sp. 50-60 \approx 4-5, pedicello elongato usque ad 100 μ .; sporidiis ellipticis rotundatis, sordide fuscis, 6-8,5 \approx 2,5-3,5.

Hab. in ligno corticato, Sao Leopoldo Brasiliæ. — *Num. maculata* valde affinis; vetusta vix discernenda; specimina typica vero margine indistincto, defectu macularum facile distinguenda. Secundum Rehm insuper differentia constat in eo quod porus ascorum jodo cærulescit, non vero speciei præcedentis. — Var. *variabilis* Theiss. l. c. Differt a typo colore fuligineo-brunneo sporidiisque fuligineis variabilibus, typice 8-9 \approx 4, sæpius in ascis usque 15-18 μ . elongatis intermixtis regularibus. — Cum typo.

17. *Nummularia pezizoidea* P. Henn. — Syll. XVII p. 618. — var. 4465

fuliginea Theiss., Ann. Myc. VII (1909) p. 12. — A typo differt

superficie non atro-nitente sed pulverulento-fuliginea, habitu magis quam characteribus diversa.

Hab. ad truncos in Brasilia Americæ austr.

18. *Nummularia sinuosa* Theiss., Ann. Mycol. VI (1908) p. 349. — 4466

Stromatibus aterrimis, pulverulento-opacis, orbicularibus 2-5 mm. diam. in figuras exquisite interrupte sinuosas confluentibus, vix 1 mm. crassis, margine acute determinato, intus durissimis, atris; peritheciis ovatis, angulatis, minutis, parietibus durissimis, nitentibus, stipatis; ostiolis depressis minutissimis vix perspicuis; ascis p. sp. 140-170 \times 10-12, pedicello brevissimo; sporidiis atris utrinque subacutis, grosse 1-guttatis, 28-35 \times 9-11.

Hab. in ligno duro corticato, Sao Leopoldo Brasiliæ.

19. *Nummularia Theissenii* Syd. in Theissen, Ann. Mycol. VII (1909) 4467

p. 344. — Stromate epidermide fusco-brunnea primo tecto, late effuso, continuo v. formis exquisitis sinuoso-interrupto et labyrinthiformi, juventute fusco-atro, glabro, subnitenti, ætate pulverulento-opaco, piceo-atro, semper acute marginato, applanato, vix 1 mm. cr., ostiolis vix conspicuis, ætate griseo-punctiformibus pertusis; peritheciis stipatissimis, contextu duro, nigro-nitenti, ovato-polygonatis, minutis; ascis cylindraceutis, breviter pedicellatis, supra rotundatis, 8-sporis, p. sp. c. 85-110 \times 7-8; pedicello 12-35 μ . longo; sporidiis monostichis, fusco-brunneis, ellipsoideis v. oblongis, utrinque angustato-rotundatis, rectis, irregulariter (typice 2-) guttulatis, 12-18 \times 5-6,5.

Hab. in corticibus Sao Leopoldo Rio Grande do Sul, Brasilia.

— *Numm. anthracodi* (Fr.) Cooke affinis.

20. *Nummularia viridis* Theiss., Ann. Mycol. VI (1908) p. 350. — 4468

Stromatibus flavo-viridulis, dein viridi-fuligineis, margine lætiore flavidulo, tenuissimis, vix 400 μ . crassis, ambitu orbiculari 5-10 mm. diam., rarius confluentibus, planis, non elevatis, superficie ostiolis atris minutis punctata, contextu molliusculo; peritheciis penitus immersis, ovatis, atris c. 250 μ . diam.; ascis gracilibus cylindraceutis p. sp. 60-75 \times 5-6 $\frac{1}{2}$, pedicello 35-55 μ . longo; sporidiis obscure brunneis, biguttulatis, ellipticis, rectis, 6 $\frac{1}{2}$ -9 \times 3-3 $\frac{1}{2}$.

Hab. ad ligna subputrida in locis periodice inundatis (« banha-dos » dictis) Sao Leopoldo Brasiliæ. — Linea viridis per lignum excurrit.

21. *Nummularia Starbäckii* Sacc. et Trav. — Syll. XX, p. 203 — 4469

Nummularia tenuis Starb., Ascom. Schwed. Chaco-Cordill. Exp., Arkiv. f. Bot. Bd. V (1905) p. 31, fig. 23 a-b, non Pass. — Stro-

matibus sparsis vel gregariis, interdum confluentibus, plane irregulariter determinatis, plerumque longitudinaliter attenuatis, margine arcuato vel lobato, tenuissimo, peridermio vix protuberante, lilacino-griseo, rugosiusculo diu tectis, denique, illo secedente, nigris, superficie tota eleganter parallele striata, tenuissima, textura carbonacea, latiuscule effusis; peritheciis monostichis, dense constipatis et mutua pressione difformibus, plerumque sphaerioideo-oblongatis, ostiolis discoideo-conicis, sæpe umbilicatis vel acutiuscule et gibberose marginatis, fere patelliformibus sparsim prominentibus, minutis; ascis octosporis, cylindraceis, sursum rotundatis vel rotundato-detruncatulis, plus minusve unifoveolatis, fere sessilibus, $100 \approx 8-9$; jodi ope areola cuboidea sursum cærulescente; sporidiis monostichis, ellipsoideis, utrinque plerumque acutiusculis, interdum rotundatis, sæpe guttulatis, fuscis, $12-14 \approx 6-7,5$; paraphysibus vix ramosis, filiformibus, ascos superantibus.

Hab. in ramis humi jacentibus pr. Laguna de la Brea, prov. Jujuy, Argentina et in Gran Chaco Boliviae. — Quoad habitum cum *N. microplaca* et *N. hypophlæa* valde congruens, partibus internis autem satis differt; a *N. exutante* cui maxime affinis, forma stromatum, peritheciis satis diversa.

USTULINA Tul. — Syll. I p. 350, IX p. 542, XI p. 285.

1. *Ustulina microsperma* Trav., Fl. it. crypt. Pyren. (1906) p. 37 (ex 4470 err. *U. microspora*). — Stromate superficiali, subeffuso, irregulariter convexo-pulvinato, undulato, 2-3 cm. et ultra diam., 2-10 mm. cr., carbonaceo-fragili, extus æneo-nigricanti, intus nigro; peritheciis majusculis, globoso-ovoideis, 1 mm. usque diam., monostichis, stipatis, crusta stromatica crassa tectis; ostiolis prominulis, punctiformibus, obtusiusculis; ascis cylindraceis, pedicellatis, p. sp. $90-100 \approx 7-8$, paraphysibus filiformibus paucis obvallatis; sporidiis oblique monostichis, ellipsoideo-fusoideis, sæpe parum inæquilateris, nigricantibus, $14-16 \approx 5-6$, guttulatis.

Hab. ad corticem Quercus, Selva Pisana et Apennino Pi-stojese Italia centr. — Ab *U. maxima* (Web.) Wetts. pluribus notis diversa.

2. *Ustulina pyrenocrata* Theiss., Ann. Mycol. VI (1908) p. 347. — 4471 Late pulvinato-effusa, e fusco lurido-nigra, durissima, intus æneo-nitens, stratis tribus distinctis: basali compacto atro-nitente, superiore verticaliter fibroso, medio pyrenophoro rufo-brunneo fibroso; superficie ætate eroso-perforata; peritheciis maximis, irre-

gulariter depressis, cylindræo-globosis, 3-5 mm. altis et latis, extus luride brunneo-sericeo-vestitis, parietibus durissimis atris nitentibus, ostiolo angusto stratum corticale perforante, intus massa glutinosa faretis; ascis non observatis; sporidiis giganteis, atris, continuis, ellipticis, utrinque rotundatis, junioribus 35-60 \times 20-25, vetustioribus 70-110 \times 40-55 variantibus. [Intermixtæ inveniuntur sporæ hyalinæ continuæ elongatæ, rectæ vel curvulæ, guttulatæ, 20-24 \times 6-7].

Hab. ad corticem crassum in silva, Sao Leopoldo Brasilia (Dr. Rick S. J.). Recedit ab *Ustul. macrosperma* (Mont.) Sacc. forma late pulvinato-effusa, peritheciis non oblongis sporidiisque majoribus non cymbiformibus. A typo generis nonnihil recedens.

3. *Ustulina maxima* (Weber) Wettst. in Verb. zool.-bot. Gesellsch. 4472
Wien (1885) p. 592. — Ita vocanda, prioritatis causa, *Sphaeria maxima* Weber, *Ustulina vulgaris* Tul. — Syll. I, p. 351.

PORONIA Willd. — Syll. I p. 348, IX p. 542, XI p. 285, XVI p. 451, XVII p. 620.

1. *Poronia ? cælata* Pat., Bull. Soc. Myc. de Fr. XXII (1906) p. 57. 4473
— Stromate erecto, simplici, stipite subcylindræo, 7 cm. longo, apice 1 mm. cr., basim versus regulariter incrassato, longitudinaliter striato, vix squamuloso, inferne villosa, extus sordide brunneo, intus flavescens, apice in discum placentiformem, 6 mm. diam. lutescentem superficie cælatum dilatato; contextu subcitrino, molli, ex hyphis 10 μ . latis formato; peritheciis sporidiisque non visis.

Hab. in ligno putrido, Tahiti Polynesiae.

2. *Poronia macrospora* Peck, Bull. Torr. Bot. Cl. XXXIII (1906) 4474
p. 220. — Stromate 0,75-1,5 cm. lato, irregulari, late ovoideo v. depresso globoso, stipitato, ostiolis nigris v. nigricantibus leniter prominentibus punctato, rubro-brunneo v. nigro-brunneo, intus albo; stipite irregulari, flexuoso, angusto, simplici v. apice parce subramoso ibique sæpe incrassato, basi crispato-tuberculato et perforato, brunneo-nigro, intus albo; peritheciis immersis, nigris, ostiolis pallidioribus; sporidiis magnis, ellipsoideis, primum hyalinis et muco involutis, pallide coloratis, 40-60 \times 20-30.

Hab. in sabulosis in horto, New Haven Connect. Amer. bor. (P. W. GRAFF).

STILBOHYPOXYLON Theiss. Ann. Mycol. VI (1908) p. 344 (Etym. *Stilbum* et *Hypoxylon*). — Stroma conidiophorum subulatum, stilbiforme; stroma ascophorum subglobosum sessile v. substipitatum ad basim stromatis conidiophori (quod interdum ascophorum percurrit et apice mucronatum reddit). Asci octospori elongati; sporidia ellipsoidea, continua, brunnea.

1. **Stilbohypoxylon Rehmii** Theiss., Ann. Mycol. VI (1908) p. 344. — 4475
Stromate conidiophoro subulato usque ad 2 mm. alto, basi atra subdilatata, sursum cinereo-pallido, apice æquali vel subcapitato; stromate pyrenophoro globoso sessili vel subtus stipitiformi-atenuato, 700-950 μ . diam. vel depresso 600 μ . alto, atro-griseo, rugoso v. verruculoso, intus subcarnoso candido, apice (stromate olim conidiophoro percurrente) breviter mucronato, ostiolis atris vix perspicuis; peritheciis paucis, minimis, sparsis, immersis, atris; ascis cylindricis p. sp. 75-100 μ . longa, pedicello 35-50 μ . longo; sporidiis octonis brunneis, subdistichis, ellipticis, continuis, obtusis vel hinc inde subapiculatis, gutta una magna vel pluribus præditis, 16-22 \approx 7-9.

Hab. in ramulis emarcidis plantæ scandentis in silva, Sao Leopoldo, Brasilia.

SPIROGRAMMA Ferdin. et Winge, Vidensk. Meddel. fra den naturh. Foren. Kiøbenhavn (1908) p. 142 (Etym. ex lineola spirali sporidiorum). — Stroma subpulvinatum, per corticem erumpens, strato externo tenui, carbonaceo, fusco-nigro, intus medullaceum, niveum; perithecia in singulo stromate pauca, medulla nivea immersa, ostiolis vix exsertis prædita; asci 8-spori, paraphysati; sporidia forma gen. *Hypoxyli*, eseptata, maturitate fusca, lineola spirali (germinationis?) lucida circumscripta. — Genus habitu fere sectionis *Clitoxyli*, generis *Hypoxyli*, ad *Xylariam* reapse propius accedens, characteribus autem distinctis, partim sporidiorum, partim stromatis satis diversum.

1. **Spirogramma Boergesenii** Ferdin. et Winge, Vidensk. Meddel. fra 4476 den naturh. Foren. i. Kiøbenhavn (1908) p. 143, tab. IV, fig. 3. — Stromatibus ligno insidentibus, per corticem erumpentibus, semigloboso-pulvinatis, rugulosis, ad basim constrictulis, densiuscule, nonnumquam subseriatim dispositis, raro 2-4 confluentibus, strato externo tenui, carbonaceo, fusco-nigro, intus medullaceis, niveis, 1-2 mm. diam. ad 1 mm. alt.; peritheciis in singulo stromate 2-6, in medulla interiore immersis, pro ratione maximis, globosis, in-

terdum mutua pressione angulatis, circ. $\frac{1}{2}$ mm. diam, submonostichis, nonnumquam minoribus intermixtis; ostiolis vix exsertis, sub lente etiam ægre conspicuis; ascis cylindraceutis, superne incrassatis, rotundatis, poro jodi ope intense cærulescente, $5-6 \times 3$, inferne in pedicellum fragilem usque ad 90 μ . longum leniter attenuatis, parte sp. 120-140 (plerumque 125) \times 10-14; sporidiis octonis, superne oblique, inferne subrecte monostichis, e dorso visis oblongis v. elongato-ellipsoideis, e latere curvulis, utrinque rotundatis, $21-24 \times 7-8$, juvenilibus guttulatis, translucido-flavis, maturis continuis v. rarius plasmate irregulariter partito, fuscis, lineola (? germinationis) spirali, tenui, sub vitro flava, quæ antice in dorso oritur, sporidium semel sinistrorsum ambit, ideoque postice in dorsum iterum pervenit ornatis; paraphysibus longis, tenuibus, evanidis.

Hab. ad ramos siccos arborum in insulis St. Croix et St. Jan Indiæ occidentalis (F. BOERGESEN).

XYLARIA Hill — Syll. I p. 309, IX p. 523, XI p. 283, XIV p. 504, XVI p. 442, XVII p. 622.

I. *Xyloglossa*.

1. *Xylaria polymorpha* (Pers.) Grev. — Syll. I, p. 309. — var. **com- 4477**
binans Peck, New York State Mus. Bull. n. 116 (1907) p. 33. — Stromatibus subglobosis, sæpe compressis et irregularibus, in apice ramorum e terra surgentibus cæspitosis; peritheciiis et sporidiis ut in typo.

Hab. in radicibus v. caulibus emortuis, Bridgeport Ct., Amer. bor. (P. W. GRAFF). — Ob stromata globosa et cæspitosa a varietatibus *Xylariæ Hypoxyli* et *X. spathulata* differt.

2. *Xylaria subinvoluta* v. Höhnelt, Ergebn. Bot. Exp. Südbras. 1901, 4478 Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) extr. p. 27. — Stromatibus solitariis, raro 2 basi adnatis, cylindraceuto-clavatis, siccis plerumque subcompressis, 15-40 mm. alt., 5-13 lat., 5-7 mm. cr., supra rotundatis, ubique peritheciiis tectis, plerumque sessilibus v. pedicello brevi crassiusculo usque ad 10 mm. longo donatis, nigris, opacis, basi plus v. minus umbrinis v. castaneo-brunneis, ob ostiola peritheciorum subprominentibus rugulosis; crusta stromatica longitudinaliter plicato-fissa et marginibus involutis; peritheciiis globoso-ovoideis, 500-600 μ . diam.; ascis numerosissimis,

cylindræis, 100-110 \approx 5-6, plerumque octosporis raro tetra- v. hexa-
sporibus; paraphysibus numerosissimis, tenuibus, muco vestitis; spo-
ridiis plerumque laxè rectè monostichis, nigricantibus, ellipsoideis,
utrinque fusoideo-acutatis, plerumque 8 \approx 3.

Hab. in ligno putri in silvis primævis, prope Raiz da Serra
Sao Paulo Brasiliæ. *Xylaria involuta* Sacc. et *claviformi* Starb.
affinis.

3. *Xylaria radicata* P. Henn., Engl. Jahrb. XXXVIII (1905) p. 127. 4479

Stromatibus simplicibus v. basi fasciculatis longè radicatis, cylin-
dræo-clavatis vel fusoideis, primo cinereo-pruinosis, dein atris,
usque ad 8 cm. longis, 5 mm. cr., parte radiceformi usque ad 65
cm. long., 1 cm. crassis, teretibus; peritheciis immersis, vix ostio-
latis (plerumque immaturis); ascis longè cylindræis, octosporis,
oblique monostichis, navicularibus, c. 15 \approx 4 immaturis.

Hab. in radicibus putrescentibus Coccoes, Lome Togo Africae
centr. (WARNECKE).

4. *Xylaria strobiliformis* P. Henn., in Voeltzkow Reise Ostafrika III 4480

(1908) p. 31, tab. III, fig. 25. — Stromatibus ovoideis, stipitatis,
strobiliformibus, atro-carbonaceis, intus gilvis, extus rugulosis, pun-
ctoideo-ostiolatis, c. 2 cm. long., 1,5 cm. latis, stipite subsquamoso,
ferrugineo, 6-9 mm. longo, c. 3 mm. cr.; peritheciis immersis
subglobosis, atris, c. 0,5 mm. diam.; ascis cylindræis, octosporis,
p. spor. circ. 120-130 \approx 7-10; sporidiis oblique monostichis, oblonge
navicularibus, utrinque obtusiusculis, atris, 16-26 \approx 6-9.

Hab. in ligno Fianarantsoa Madagaskar. — *Xyl. polymorphæ*
(Pers.) var. *hypoxyleæ* Nits. affinis.

5. *Xylaria pallide-ostiolata* P. Henn., Engl. Jahrb. XXXVIII (1905) 4481

p. 128. — Stromatibus clavatis stipitatis 1-3 cm. long., atro-ru-
fis, clavula subtereti apice obtusa, 4-5 mm. crassa, verrucoso-ru-
gulosa, ostiolis prominulis, zona pallida depressa circumdatis; sti-
pite usque ad 1 cm. longo, 2 mm. crasso, subtereti, ruguloso, atro-
fusco, levi; peritheciis immersis, ovoideis, 0,6-0,9 mm. diam.; ascis
clavatis apice obtusis, basi stipitatis, 150-170 μ . long., p. spor.
110-130 \approx 5-8, octosporis, paraphysibus mycelioideis hyalinis c. 2
 μ . crassis; sporidiis oblique monostichis, fusoideo-navicularibus,
utrinque obtusis v. subacutiusculis, 15-20 \approx 5-7, atris.

Hab. in ligno putri, Victoria Kamerun Africae (WINKLER).

6. *Xylaria arenicola* Welw. et Curr. — Syll. I, p. 311. — var. bra- 4482

siliensis Theiss., Ann. Mycol. VI (1908) p. 344. — Stipite radi-
cato, rhizoide, sordide cinereo, sursum fuligineo, subæquali sul-

cato, longitudine varia, simplici vel pluribus fasciculatis; clava paullo incrassata, lanceolata, atra, sulcata, utrinque subattenuata, simplici vel furcata, apice fertili vel acuminato, griseo-pulveraceo, sterili, sæpius applanato-furcato, superficie ob perithecia obtuse v. subconice prominula torulosa, $5-35 \times 1-3$ mm.; peritheciis confertis v. interrupte sparsis, areola plus minus distincta glabra et papilla acutiuscula instructis, vix 300μ . diam.; ascis $65-85 \times 5-7$, p. spor. $45-70 \mu$. longa; sporidiis ellipticis rotundatis, fusco-badiis, $6-10 \times 4-5$; paraphysibus filiformibus.

Hab. ad nidos Termitum locisque arenosis, Sao Leopoldo Brasilia (J. Rick S. J.). — *Xylaria nigripedi*, *X. scoticæ*, *X. rhizomorphæ* etc. affinis, sed satis distincta.

7. *Xylaria brevipes* Sacc. et Fairm. in Saccardo, Microm. Amer. 4488 novi, Journ. of Myc. XII (1906) p. 47. — Stomatibus solitariis v. rarius binatis, lignicolis, cylindræis, basi rotundatis paullo crassioribus, sursum sensim tenuatis, brevissime stipitatis, ob ostiola acutiuscula vix prominula asperulis, glabris, opace nigris, intus candidis, totis $2,5$ cm. longis, 3 mm. diam.; stipite crassiusculo, cylindræo, longitrorsum sulcato, glabro, nigro, $1-3$ mm. long., $1-1,5$ mm. cr.; peritheciis immersis, globosis, monostichis, $250-300 \mu$. diam., nigris; ascis cylindræis longe sensimque tenuato-stipitatis, parte sporif. $70 \times 5,5-6$; sporidiis recte v. oblique monostichis, ellipsoideis, inæquilateris, utrinque obtusatis, $11-12 \times 4-4,5$, fuligineis.

Hab. ad truncos dejectos pr. Lyndonville, New York, 1905. — Pertinet ad subgen. *Xyloglossa* Sect. b. Habitu aliquid accedit ad *X. corniformem* et *X. cupressiformem* sed characteribus variis recedit. — Var. *africana* Sacc., Myc. cong. novi, Ann. Myc. IV (1906) p. 75, tab. II, fig. 4. — A typo americano differt ostiolis paullulo minus prominulis, substantia interiore lignicolore nec alba. Totus fungus nigricans, $4,5-5$ cm. altus, $3,5-4$ cm. cr., stipes $7-8$ mm. longus, $1,7-2$ mm. cr., sulcatus, glaber; sporidia $9-10 \times 5$; asci breve stipitati, $60 \times 5,5-6$, parte sporifera. — Ad caudices, Kisantu, Congo Africæ (J. Gillet).

8. *Xylaria fibula* Massee, Kew Bull. n. 7 (1906) p. 256. — Stoma- 4484 tibus sessilibus, pulvinatis, subtus umbilicatis, extus fusco-atris, opacis, minutissime granulatis, intus albo-farctis, suberosis, $1-1,5$ cm. latis; peritheciis majusculis, globosis, vix papillato-ostiolatis; ascis cylindræis apice obtuse rotundatis, basi elongato-pedicellatis, paraphysibus filiformibus obvallatis, octosporis; sporidiis oblique

monostichis, ellipsoideis, inæquilateralibus, $26-30 \approx 8-10$, primo 2-guttulatis dein opace fuliginis.

Hab. in ligno emortuo Bukit Timak Singapore Asiæ orient. (RIDLEY). — *X. tuberiformi* proxima.

9. *Xylaria gigantea* (Zipp. et Lév.) Fr. — Syll. I, p. 324.

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Hab. quoque in insula Java (HEINRICHER). — Clava 10-12 cm. longa, 2-3 cm. crassa, luride fulva vel tabacina, intus pallida, cava; stipite 2-5 cm. longo, 7-10 mm. crasso vel subnullo, peritheciis globosis, nigris, ore vix prominulo; ascis cylindraceutis, parte sporifera $150 \approx 9$ stipite longissimo, filiformi, usque ad 75 μ . vel ultra; sporidiis reniformibus, fuscis, $20-23 \approx 7$. Species hæc meo sensu, tantum forma majuscula *Xylariæ tabacinæ* Kickx (1841) est. Etiam *Xylaria Wrightii* Berk., *X. involuta* Kl., *X. portoricensis* Kl. et *X. Gomphus* Fr. saltem prouti ab autoribus intelliguntur huc sunt referendæ. (Bresadola, Ann. Mycol. V (1907) p. 240).

10. *Xylaria involuta* Kl. — Syll. IX, p. 538 — var. *nigrescens* Sacc., 4486

Myc. cong. novi in Ann. Myc. IV (1906) p. 75, tab. II, fig. 6. — A typo dignoscitur clavulis paullo brevioribus et angustioribus, nempe 5 cm. longis, 1-1,2 cm. cr., sæpius magis incurvatis, extus totis æqualiter nigricantibus (nec ochraceo-tabacinis et ob ostiola nigra punctulatis), intus ut in typo, lignicoloribus et compactis; peritheciis globosis immersis, nigris, 1 mm. diam., æque ac in typo.

Hab. ad truncos, Kisantu Congo Africæ (J. GILLET). — Stromata, ut in typo, mox longitudinaliter profunde sulcata et subinde fissa. Asci cylindrici, breve stipitati, $90-110 \approx 7-7,5$; sporidia navicularia, inæquilatera, atro-fuliginea, $14-18 \approx 5,5$. *Xylariæ involutæ* synonyma sunt: *X. tabacina* (Kx.) Berk. et *X. Telfairii* (Berk.) Sacc. — Syll. I, p. 320 et 324.

11. *Xylaria obesa* Syd., Ann. Mycol. V (1907) p. 400 cum icon. — 4487

Stromate maximo, difformi, e pluribus partibus quasi confluis compressis constante, toto (uno tantum viso) 15 cm. alto, 10 cm. lato, basi stipitiformi crasso sterili prædito, intus lignoso-carnoso pallido; cortice primitus concolori, tandem in parte perithecigera intus atro carbonaceo, extus autem albido ibique plicato-areolato; peritheciis æque distributis, punctiformibus, atris, immersis, apice parum prominulis, carbonaceis; ascis clavatis, apice rotundatis, breviter stipitatis, octosporis, $70-80 \approx 8-12$; sporidiis oblique monostichis, anguste ellipsoideis, subinde leniter inæquilateris, continuis, ex hyalino atro-fuscis, $12-16 \approx 4-6 \frac{1}{2}$.

Hab. ad lignum, Kibateni in Africa orient. germanica, (A. KARASEK).

12. *Xylaria papillata* Syd., in De Wildem., Flore Bas-et Moy. Congo 4488 t. III, fasc. I (1909) Extr. p. 18. — Sporomatibus plerumque gregariis, minutis, immaturis conicis, maturis plus minusve globosis 2-4 mm. latis, superficialibus, basi stipitiformi latente instructis, apice præsertim in junioribus minute papillatis, primitus albidis, tandem atris, carbonaceis fragilibus; peritheciis vix prominulis, minutissimis; ascis jam elapsis; sporidiis ellipsoideis subinde naviculiformibus, continuis, fuscis, 15-20 \times 8-10.

Hab. ad cortices, Kisantu, Congo Africae (VANDERYST).

13. *Xylaria Rickii* Theiss., Ann. Mycol. VI (1908) pag. 342, cum 4489 icon. — Stipite glaberrimo, sulcato, brunneo-fuligineo, tereti vel compresso, 8-30 \times 1-5 mm., intus lignicolore; clava generatim laminato-compressa, rarius cylindrica vel fusiformi, 30-40 \times 2-4 mm., aterrima, laccata, nitentissima, juventute æneo-cærulescente, ostioli obtusis semiglobosis opacis punctata, longitrorsum sulcato-impressa, sursum polymorpha ac varie dilatato-divisa vel plicata, intus lignicolore, strato tamen peripherico albo; peritheciis minutis, globosis, 200-300 μ . diam. immersis; ascis p. spor. 120-140 \times 7-9, breviter pedicellatis; sporidiis rectis vel plano-convexis vel curvulis, rotundatis, pluriguttulatis, opacis, 20-28 \times 6-7; paraphysibus stipatis filiformibus 2 μ . crassis.

Hab. ad truncos in silva, Sao Leopoldo Brasilia (J. Rick S. J.).

— Affinis *X. zeylanicæ*.

14. *Xylaria riograndensis* Theiss., Ann. Mycol. VI (1908) pag. 343, 4490 cum icon. — Minuta, 5-15 mm. longa, 1-2 mm. lata; stipite brevi, rubigineo-pruinoso, basi subdilata ochraceo-annulata; clavula delicata, testaceo-miniata vel aurantiaca, intus alba, superficie æquali vel peritheciis mammillose prominulis undulata, supra sensim attenuata sterili acuta, juventute apiculo conidiophoro albo-floccoso coronata; peritheciis minutis 200-300 μ . diam., mammillato-prominulis, disco dilutiore melleo cinctis, ostiolo aterrimo hemisphærico vel subconico exserto; ascis p. sp. 70-95 \times 6-7, jodo cærulescentibus, pedicello 30-55 μ . longo; sporidiis fusco-badiis, utrinque rotundatis vel vix angustatis, nitide 1-2-guttatis, 11-15 \times 4-5.

Hab. ad ligna, Petropolis, Rio Grande do Sul, Brasilia (J. Rick S. J.). — Differt a *Xyl. venosula* Speg. clava non reticulato-rimosa, peritheciis non omnino immersis et sporidiis.

15. *Xylaria transiens* Theiss., Ann. Mycol. VI (1908) p. 341, cum 4491

icon. — Stromate conidiophoro brevi, flabelliformi, plicato-crispato vel plus minus clavato-arbusculiformi, albo-roseo, dein griseo, a clavula juvenili sensim elevato, postea deciduo; conidiis ovoideis, $6-10 \times 2-4$; stromate pyrenophoro: stipite columnæformi indumento crasso æneo-violaceo-pannoso vestito, 2-3 cm. longo, 7-10 mm. cr. in clavam transeunte, clava primitus gilvo-isabellina, dein rubro-aurantiaca vel brunneo-nigrescente, late compresso-ovata vel spathulata, apice rotundato, $12-20 \times 8-16 \times 2-4$ mm., intus farcta alba, superficie reticulato-fissa prorumpentibus ostiolis æneo-nigris obtusissimis; peritheciis globosis stipatis 500-700 μ . diam.; ascis p. sp. 90-115 \times 9-11, pedicello 40-70 μ . longo; sporidiis 19-24 \times 9-10, oblongo-ellipticis, rotundatis, brunneo-nigris, grosse 1-2-guttulatis.

Hab. ad lignum emortuum in silva, Petropolis, Rio Grande do Sul Brasilia (J. RICK S. J.).

16. *Xylaria torquescens* Sacc., Myc. cong. novi, Ann. Myc. IV (1906) 4492 p. 74, tab. II, fig. 5. — Parce fasciculata, tereti-clavata, subsessilis, sed deorsum sensim tenuata, tota glabra, 9-10 cm. alta, 1-1,5 cm. cr., sordide cinerea, initio (ut videtur) molliuscula, mox are-scendo fortiter flexuoseque contorta et irregulariter plicata, intus excavata, crusta demum valde fragili et secedente, ob ostiola punctiformia crebra seriatim disposita minute lineato-reticulata, interne albicante; peritheciis globosis, immersis, diu molliusculis et pallidis dein nigricantibus, vix 0,5 mm. diam.; ascis jam resorptis; sporidiis ellipsoideo-navicularibus, utrinque rotundatis, inæquilateris, $11-11,5 \times 5,5$, fuligineis.

Hab. ad caudices, Kisantu, Congo, Africa (J. GILLET). — *Xyl. grammicæ* affinis, sed magis fragilis, pallidior, peritheciis mollioribus et imprimis sporidiis minoribus (nec 15-18 μ . longis).

17. *Xylaria sessilis* Ferd. et Winge, Botanisk Tidsskr. XXIX (1908) 4493 pag. 18, tab. II, fig. 7. — Clavulis ellipsoideo-cylindræceis, basi subito constrictis, sessilibus, textura carbonacea intusque denique cavis, 3-4 mm. long., 2 mm. cr., rugosis, fuscis; peritheciis globosis circ. $\frac{1}{2}$ mm. diam., ostiolis papilliformibus, minutissimis, sub lente etiam ægre conspicuis, prominentibus; ascis cylindræceis, juvenilibus apice usque ad 7 μ . incrassatis, truncatis, poro jodi ope cærulescente, in stipitem longissimum leniter attenuatis, paraphysatis, maturis evanescentibus, parte sp. 80-100 \times 6-7; sporidiis monostichis, e dorso ellipsoideis v. oblongo-ellipsoideis, non-

numquam ovatis, e latere inæquilaterali-subnavicularibus, sæpeque curvulis, 11-15 μ . c. long. \approx 5-6 μ . cr., 2-guttulatis, fuscis.

Hab. ad ramulum corticatum in insula St. Thomas Indiæ occ. (RAUNKIAER).

18. *Xylaria reducta* Syd., Ann. Myc. V (1907) p. 339. — Stroma- 4494
tibus solitariis v. subinde paucis aggregatis, erectis, rectis v. sæpius leniter curvulis, teretibus, apice obtusis, deorsum vix v. parum attenuatis, stipite nullo v. subnullo, totis 1-2 cm. altis, $\frac{1}{2}$ - $\frac{4}{5}$ cm. latis, obscure atro-brunneis, peritheciis immersis, minutissimis punctiformibus, atris; ascis cylindraceis v. subfiliformibus, apice obtusis, pedicellatis, 65-75 \approx 5-6, octosporis; sporidiis monostichis, ellipsoideis, utrinque acutiusculis, continuis, fuscis, opacis, 6-8 \approx 3-4.

Hab. ad lignum, Kiemoni in Africa orient. germanica (A. KASEK).

19. *Xylaria rugosa* Sacc., Myc. cong. novi, Ann. Mycol. IV (1906) 4495
pag. 74, tab. II, fig. 2. — Fasciculata, suberoso-lignosa, breviter stipitata, casse clavata, tota 3-4 cm. alta, 1-1,5 cm. crassa, fuliginea (nec nigra) in sicco eximie plicato-rugosa sed, ob ostiola latentia superficie levigata, intus lignicolore compactiuscula; peritheciis globosis, 0,5-0,7 mm. diam., immersis; ascis cylindraceis, p. sporif. 110-120 \approx 9-10; sporidiis navicularibus, inæquilateris, utrinque obtusulis, e latere compressis, 22-25 \approx 8-9, atro-fuligineis.

Hab. ad truncos, Kimnenga Congo, Africa (J. GILLET). — Affinis *X. holobaphæ*, sed stromata valde rugosa, sæpius fasciculata, breviora, obtusa; forte affinis *Xyl. curtæ* sed sporidiis longioribus recedit.

20. *Xylaria ophiopoda* Sacc., Myc. cong. novi, in Ann. Myc. IV (1906) 4496
p. 74, tab. II, fig. 1. — Solitaria, longissime stipitata, tota glabra, 18-20 cm. alta, suberoso-lignosa; clava tereti-oblonga, inæquali, apice obtusa, nigra, 12-14 mm. cr., superficie valde rugosa sed ostioliis vix punctulata, intus compacta lignicolore; stipite cylindraceo, valde tortuoso, rugoso-sulcato, fusco-nigricanti, 14-15 cm. longo, 4 mm. cr.; peritheciis globosis, immersis, 0,7 mm. diam., totam clavam occupantibus et nonnullis in partem sup. stipitis descendantibus; ascis cylindricis, p. sporif. 160-170 \approx 11-12; sporidiis navicularibus, inæquilateris, utrinque obtusulis, 25 \approx 9-10, atro-fuligineis.

Hab. ad caudices, Kisantu, Africæ (J. GILLET). — Præcipue stipite prælongo a formis *X. polymorphæ* dignoscitur.

21. *Xylaria lignosa* Ferd. et Winge, Botanisk Tidsskr. XXIX (1908) 4497

p. 18, tab. II, fig. 6. — Stromate grosse clavato, compresso, subcurvato, leviter torto, solido, lignoso, apice obtuso, postice in stipitem crassum, brevissimum, glabrum, clavæ concolorem sensim attenuato, extus ruguloso, fusco, ex ostiolis peritheciolorum nigropapillato, intus ex argillaceo fumoso, long. usque ad 11 cm., cr. $4 \approx 2$ cm.; peritheciis dense stipatis, late ellipsoideis, $\frac{3}{4}$ -1 mm. $\approx \frac{1}{2}$ - $\frac{3}{4}$ mm.; ostiolis papilliformibus, nigris, subnitentibus, poro minuto pertusis; ascis plurimis jam resorptis, paucis evanescentibus visis, poro jodi ope cærulescente; sporidiis e dorso elongato-ellipsoideis, e latere navicularibus, utrinque rotundatis, guttulatis, 14-18 \approx 6-7,5, maturis atris.

Hab. ad truncos in insula St. Croix Indiæ occid. (RAUNKIAER).

22. *Xylaria elegans* Syd., Ann. Mycol. V (1907) p. 357, cum icon. — 4498
Stromatibus solitariis, totis 1,5-3 cm. longis, clavula oblongo-conica, 1-1,5 cm. longa, 3-5 mm. crassa, apice acuta, basi haud in stipitem attenuata, crusta dealbata omnino tecta, intus pallida lignosa; stipite cylindrico, $\frac{3}{4}$ -1 $\frac{1}{2}$ cm. longo, 1-1 $\frac{1}{2}$ mm. crasso, atro, glabro, longitudinaliter sulcato; peritheciis immersis, atris, punctiformibus, minutis; ascis cylindræis, breviter stipitatis, 110-150 \approx 12-16, octosporis; sporidiis monostichis, cymbiformibus, continuis, fuscis, plerumque 2-guttulatis, 30-42 \approx 10-14.

Hab. ad truncum putridum, Prov. Sao Paulo, Sao Francisco dos Campos, Brasilia.

23. *Xylaria appendiculata* Ferd. et Winge, Botanisk Tidsskr. XXIX 4499 (1908) p. 17, tab. II, fig. 5. — Stromatibus nunc hypoxylloideis, subglobosis, nunc clavatis, stipitatis; clavulis rugosis, ostiolis peritheciolorum exasperatis, long. usque ad 3 mm., 1 mm. fere cr., fusco-nigris, intus niveis, deorsum in stipitem primo albo-farinosum, mox nudum, longitudinaliter striatum, clavulæ fere colore et longitudine leniter attenuatis; peritheciis remotis, globosis, 200 μ . circ. diam., ostiolis semiglobosis v. subconicis, magnis, prominentibus; ascis cylindræis, apice rotundatis, poro jodi ope intense cærulescente, in stipitem leniter attenuatis, 105-115 (parte sp. 80-87) \approx 7,5-8 $\frac{3}{4}$; sporidiis monostichis, octonis rarissime quaternis, 14 μ . long., coffeiformibus, 11-12,5 \approx 6,5-7, 2-guttulatis, fuscis, mucotenui indutis, utrinque appendicula obtuse conica, hyalina, 2-3 μ . long. instructis; paraphysibus filiformibus, septatis.

Hab. ad folia sicca Crescentiæ cucurbitinæ (?), in insula St. Croix Indiæ occ. (RAUNKIAER).

24. *Xylaria albo-punctulata* Rehm, in Kellerman Journ. of Mycol. 4500

XIV (1908) p. 5. — Stromatibus erectis, oblongo-claviformibus, utrinque plus minusve compressis, apice rotundatis, in stipitem c. 0,5 cm. long. et 0,8 cm. lat. abeuntibus, glabris, carbonaceis, 5-6 cm. long., 1,5 cm. latis, extus fuscis, longitudinaliter substriolatis, versus stipitem nigrescentibus, intus solidis, nigris, peritheciis plane immersis, globosis, 1 mm. diam., ostioliis minimis, nigris, extus strias perspicue punctulatas in areolis orbicularibus albidis, 0,3-1 mm. latis formantibus; ascis cylindraceis longissimis, 7 μ . lat., 8-sporis; sporidiis fusiformibus, plerumque navicularibus, fuscis, 1-cellularibus, 15 \times 6, monostichis; paraphysibus filiformibus.

Hab. ad truncos, Los Amates Dep. Izabal Guatemalæ (KELLERMAN). — *Xylaria grammicæ* Mart. proxima, differt striis stromaticis distinctis confluentibusque, peritheciis minoribus atque defectu areolarum albidarum.

25. *Xylaria Laurentii* P. Henn., Etat indép. du Congo, Mission E. 4501 Laurent. fasc. IV (1907) p. 362. — Stipite elongato-radicato, rugoso, stromatibus cæspitosis, rugoso-flexuosis, tuberculatis, atrofuscis, p. p. subnitentibus; peritheciis immersis minute ostiolatis, subglobosis intus albidis; ascis filiformibus, paraphysatis, octosporis, c. 4 μ . cr.; sporidiis longe fusoideis, utrinque acutis, atrobrunneis, 17-22 \times 3-4.

Hab. ad truncos emortuos, Dibele Congo Africæ centr.

II. *Xylocoryne*.

26. *Xylaria Hercules* Speg., An. Mus. Nac. Buenos Aires t. XIX 4502 (1909) p. 347. — Solitaria v. laxe cæspitosa; clavis cylindraceis v. linguæformibus, intus farctis albo-suberosis, 5-10 cm. long., 3-5 cm. lat., 1-1,5 cm. cr., stipite abbreviato v. elongato subvelutino suffultis; peritheciis dense constipatis, e globoso subpiriformibus non prominulis 0,75-1 mm. alt., 0,6-0,7 mm. diam., coriacellis, atris; ascis cylindraceis longe pedicellatis, parte sp. 75-100 \times 7-12, pedicello subæquilongo suffultis, non v. parce paraphysatis, octosporis; sporidiis rectis v. oblique monostichis, navicularibus, 16-20 \times 6-9, opace fuligineis.

Hab. frequens ad caudices putridos cariosos in silvis circa Formosa nec non in Bobadal, Rep. Argentina Amer. austr.

27. *Xylaria sordida* Spegazz., An. Mus. Nac. Buenos Aires t. XIX 4503 (1909) pag. 348. — Cæspitosa; clavulis elliptico-lanceolatis valde

compressis 1-2 cm. long., 5-10 mm. lat., 2-3 mm. cr., utrinque attenuatis, deorsum in pedicellum breviorum pannosulum sensim attenuatis, extus sordide fuscis dense minuteque colliculoso-scrupulosis intus albo-ligneis; peritheciis dense constipatis subglobosis 0,5-0,6 mm. diam. plus minusve prominulis, fuscis, coriacellis, vix ostiolato-papillatis; ascis cylindraceutis praelonge pedicellatis apophysatis, $120 \approx 6$; sporidiis ellipsoideo-navicularibus subopace fuligineis, $9-10 \approx 4-6$, non v. 1-2-guttulatis.

Hab. ad schidia lignea putrescentia prope Cordoba et Tucuman nec non in silva Bobadal, Rep. Argentina Amer. austr.

28. *Xylaria corniformis* Fr. — Syll. I, p. 327 — var. *macrospora* 4504
Bres. in Theiss., Ann. Myc. VI (1908) p. 342. — Versiformis; typice compresso-spathulata, imo flabellata, rarius plus minus regulariter clavata, formis compressis ludens; stipite curto firmo, indumento subiculiformi purpureo-violaceo crasso, sæpius pluribus stipitibus uno subiculo crassissimo junctis; clava primo fusco-argillacea dein brunnea, scruposula, superficie areolata, apice undulato vel simplici obtusulo vel conico haud acuto; peritheciis ovato-angulatis, immersis, minutis, stipatis, 200-400 μ . diam., ostiolo delicato semigloboso prominulo; ascis p. sp. 80-100 \approx 6-8, pedicello 30-80 μ . longo; sporidiis rectis v. reniformibus, opacis, utrinque rotundatis, grosse 2-guttulatis, sæpius inasco agglomeratis $15-19 \approx 5 \frac{1}{2}-6 \frac{1}{2}$.

Hab. ad truncos in silva, Sao Leopoldo Brasiliæ. — Stipes 2-20 \approx 2-7 mm. varians; clava 15-30 mm. alta, 3-25 mm. lata, 2-4 mm. cr.

29. *Xylaria macropoda* Speg., An. Mus. Nac. Buenos Aires t. XIX 4505
(1909) p. 347. — Cæspitosa, erecta 20-25 cm. alta, sordide atro-fusca e carbonaceo suberosa; clavulis subcylindraceutis 5-10 cm. long., 1-1,5 cm. diam. colliculosis levibus, fusco-farctis, ubique fertilibus, stipite praelongo suffultis 10-15 cm. long., 5-7 mm. cr.; peritheciis subglobosis immersis, subcarbonaceis 0,8-1 mm. diam. non v. vix papillulato-ostiolatis; ascis cylindraceutis longe pedicellatis subapophysatis, parte sporif. 60-75 \approx 6, ped. 40-75 μ . longo; sporidiis anguste navicularibus fuligineis recte monostichis, 10-14 \approx 5.

Hab. ad palos humifusos subputrescentes in aridis prope Tucuman Rep. Argentina, Amer. austr. — *Xyl. longipedi* Nits. affinis sed certe distincta.

III. *Xylostyla*.

30. *Xylaria fasciculata* Speg. — Syll. I, p. 340. — f. *leptasca* Speg., 4506
An. Mus. Nac. Buenos Aires t. XIX (1909) pag. 346. — A typo
recedit ascis aparaphysatis nec non gracilioribus.

Hab. ad truncos cariosos Citri Aurantii prope Bella Vista,
Argentina Amer. austr. (J. M. HUERGO).

31. *Xylaria lima* v. Höhnelt, Ergeb. Bot. Exp. Südbras. 1901, Denk. 4507
k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. p. 27, tab. I,
fig. 6. — Stromatibus simplicibus, opace nigris, glabris; stipite
cylindraceo circ. 5 mm. long., 0,5 mm. cr., basi vix incrassato et
clavam 7 mm. longam, 1 mm. latam, cylindraceam utrinque atte-
nuatam summo apice sterilem sed lateraliter ubique ob ostiola sur-
sum versa fortiter prominentia dentatam v. serrulatam ferente;
contextu stromatico albo suberoso; peritheciis crebris circ. 260 μ .
diam., conoideo prominentibus, ostiolo rotundato circ. 30 μ . lato;
paraphysibus mucosis; ascis cylindraceis, octosporis, circ. 90 \times 7-8;
sporidiis monostichis, subpellucidis violaceo-nigris, ellipsoideo-sub-
reniformibus, unilocularibus, utrinque angustatis, 12-13 \times 6.

Hab. ad terram humosam, Raiz da Serra prope Santos, Sao
Paulo, Brasilia.

32. *Xylaria Phyllocharis* Mont. — Syll. I, pag. 342 — var. *hirtella* 4508
Theiss., Ann. Mycol. VI (1908) pag. 343. — Stipite 1-2 $\frac{1}{2}$ cm.
longo, badio-nigro, subtorto, striato, delicato, fusco-hirtello, ætate
solum glabrato; clava 6-8 mm. longa, 600-800 μ . crassa, atra, to-
rulosa, breviter apiculata; peritheciis semiliberis, globosis vel sub-
conicis, ostiolo exserto hemisphaerico v. conico; ascis p. sp. 65-
90 \times 7-9, pedicello firmo 20-55 μ . longo; sporidiis obscure brun-
neis, grosse guttatis, obtusis, gibbosis, delicate hyalino-tunicatis,
haud appendiculatis.

Hab. in foliis siccis Rubiaceæ cujusdam, in silva, Sao Leo-
poldo Brasiliæ. — Differt a typo præcipue stipite hirtello, spori-
diis largioribus peritheciisque semiliberis et clava non griseo-æneo-
leprosa. A *Xyl. phyllophila* Ces. et *Xyl. delicatula* Starb. quibus
affinis, satis diversa.

33. *Xylaria venustula* Sacc. Myc. cong. novi, Ann. Myc. IV (1906) 4509
p. 76, tab. II, fig. 10. — Cæspitosa, stipitata, exilis, tota nigra
et glabra, 3-3,5 cm. alta; stipite simplici v. rarius furcato, angu-
ste cylindrico, sicco compresso et torto, 1,5 cm. longo, vix 1 mm.

cr.; clavula cylindrica, leviter torulosa, 1,5 cm. longa, 1,5-1,7 mm. cr., extus ostiolis minutissimis punctulato-asperula, apice mucrone tereti-conico, 3-5 mm. longo, vix 1 mm. cr., sterili terminata; medulla stromatis interiore angustissima albida; peritheciis globosis, vix 0,5 mm. diam.; ascis cylindraceis, p. sporif. 90-100 \approx 7-8; sporidiis oblongo-ovoideis, leviter inæquilateris, utrinque rotundatis, atro-fuligineis, 12-14 \approx 5-5,3.

Hab. ad truncos, Kisanu, Africa (J. GILLET). — Affinis *Xyl. caespitosæ* sed stipes simplex v. rarius tantum e basi furcatus et sporidia latiora; *Xylariæ apiculatæ* sed sporidia multo breviora; *Xylariæ gracili* et *scopiformi* sed clavula manifestissime mucronata.

34. *Xylaria variegata* Syd., Ann. Mycol. V (1907) p. 358. — Stro- 4510
matibus solitariis, erectis, filiformibus, in ligno denigrato insertis simplicibus, raro etiam bifurcatis, totis 3-6 cm. longis, usque ad 2 mm. latis, sordide ochraceis, apice brevi acuto sterili, basi sterili, non incrassato, glabro; peritheciis sphaerico-mammiformibus, papillulatis, atris, sparsis vel aggregatis, 300-500 μ . diam.; ascis filiformi-cylindraceis, p. sp. 35-55 \approx 3-4, longe stipitatis, octosporis; sporidiis oblique monostichis, ellipsoideis, sæpe leniter inæquilateris, continuis, fuscis, primo 2-guttulatis, 7-9 \approx 2 $\frac{1}{2}$ -3.

Hab. in ligno, Campinas, Sao Paulo, Brasilia.

35. *Xylaria gracilentia* Syd., Ann. Mycol. VIII (1910) p. 38. — Stro- 4511
matibus ut videtur solitariis, erectis, atris, simplicibus, raro bifidis, 2-5 cm. altis, subfiliformibus, apice sterili elongato subulato 0,5-1,5 cm. longo; stipite subtereti vel compresso, glabro, filiformi, c. 1-3 cm. longo, $\frac{1}{2}$ - $\frac{3}{4}$ mm. crasso; peritheciis in stromatum parte media crassiore, usque 2 mm. crassa et 2 cm. longa, plus minus copiose sitis, subliberis, subglobosis, prominulis, majusculis, c. 1 mm. latis, distincte papillatis; ascis cylindraceis, apice obtusis, longe stipitatis, p. spor. 140-165 \approx 14-18, octosporis, stipite usque ad 100 μ . longo; sporidiis monostichis, ellipsoideis, utrinque acutiusculis, continuis, fuscis, 21-32 \approx 10-13.

Hab. ad frustula lignea Pauai, Benguet, prov. Luzon, insula Philippinenses (E. D. MERRILL).

36. *Xylaria Termitum* Jumelle et Perrier de la Bâthie in Rev. génér. 4512
de Bot. (1910) pag. 55-60, fig. 5-9. — Stromatibus conidiophoris simplicibus v. ramosis, in nidis *Termitum* parte radicali prælonga immersis; clavis cinereis cylindraceis, apice abrupte conicis, 2-6 mm. cr.; conidiophoris 30-60 \approx 5-9 apice globoso-inflatis; conidiis immersis, in vesicula capitatis, globulosis, 3 μ . diam.; stromatibus

ascophoris e parte radicali immersa prælonga tortuosa ramosa oriundis, totis glabris, indivisis; stipitibus cylindricis $1\frac{1}{2}$ -2 cm. long., nigris; clava cylindræo-clavata, albida, punctis nigris (ostiolis) notata; peritheciis immersis ovoideis 600-800 \approx 340-500; ascis breviter paraphysatis; sporidiis ovoideis, nigricantibus, 6 \approx 3, uno apice obtusioribus.

Hab. in nidis Termitis Perrieri, Madagascar. — Diagnosis imperfecta. Species testibus auctoribus distinguitur conidiis in vesicula capitatis. Quoad biologiam cfr. Auct. l. c.

IV. *Xylodactyla*.

37. *Xylaria aristata* Mont. — Syll. I, p. 333. — var. *hirsuta* Theiss., 4513
Ann. Mycol. VI (1908) pag. 344. — Stromate filiformi atroglauescente, basi vix incrassato, pilis atro-fuscis hirsuto, 10-22 \approx 0,3-0,5 mm., sulcato; capitulo globoso v. breviter elliptico, primo dealbato, dein griseo-atro 1-2 mm. diam., subtus non striato, peritheciis globosis tuberculato, apice mucrone brevi acuto conico coronato v. stromate filiformi tenuissimo longe superato, vel capitulo omnino obtuso; peritheciis pro ratione magnis, 600 μ . diam., protuberantibus, ostiolo nigro papillato in areola generatim cinerescente insignitis; ascis p. sp. 90-120 \approx 8-10, pedicello 35-70 μ . longo; sporidiis rectis vel plano-convexis, utrinque angustatis, 14-20 \approx 7-9.

Hab. in foliis siccis Rubiaceæ cujusdam in silva, Sao Leopoldo Brasiliæ. — Differt a typo peritheciis subliferis sporidiisque majoribus. Ostioli exsertis a *Xyl. marasmoidea* B. et C. et *X. axifera* Mont., sporidiis majoribus a *X. oocephala* Pat. et *Xyl. delicatula* Starb. diversa.

38. *Xylaria mauritiensis* P. Henn., in Voeltzkow Reise Ostafrika III 4514
(1908) p. 30, tab. III, fig. 24. — Stromatibus subcæspitosis, filiformibus, erectis, simplicibus v. ramosis, atris, 4-5 cm. long., c. 1 mm. cr., apice subulatis, basi strigosis; peritheciis subliferis spiculiformibus, globosis, atris, minute ostiolatis, 0,5-0,7 mm. diam.; ascis cylindræis, stipitatis, c. 100 μ . long., p. spor. 50-60 \approx 4-5, octosporis, paraphysatis; sporidiis oblique monostichis, inæquilateraliter fusoides, utrinque subacutiusculis, 8-12 \approx 3,5-4,5, atris.

Hab. in ligno, Mauritius Africa. — *X. trichopodæ* Penz. et Sacc. affinis sed differt ascis sporidiisque minoribus.

39. *Xylaria smilacicola* Speg., An. Mus. Nac. Buenos Aires t. XIX 4515

(1909) p. 348, cum icon. — Solitaria v. laxissime gregaria parva insititia; clavulis inflato-torulosis, atris, sæpe apiculatis, stipite gracili brevi suffultis, carbonaceis, 1,5-3 mm. long., 1-1,5 mm. cr.; peritheciis dense constipatis, sat prominulis, 5-24 in quaque clavula, globulosis 0,4-0,5 μ . diam., carbonaceis, minute papillato-ostiolatis; ascis paraphysatis, longiuscule pedicellatis, cylindraceis v. subclavulatis, p. sp. 80-120 \times 8-12, ped. 60-80 μ . long., octo-sporis; sporidiis ellipsoideo-navicularibus, 14-18 \times 6-8, opace fuliginis, non v. grosse 1-2-guttulatis.

Hab. ad sarmenta arida putrescentia in Parque Roca, prope Tucuman, Argentina, Amer. austr.

40. *Xylaria Copelandi* P. Henn., Hedwigia XLVII (1908) p. 260. — 4516
Stromatibus dense cæspitosis, ovoideis, breve stipitatis, rugulosis, pruinosis v. cinereo-pilosulis, atris, apice longe rostratis, c. 1 mm. diam., sæpe longitudinaliter sulcatis, paucilocularibus; ascis cylindraceo-clavatis, pedicellatis, p. spor. 80-90 μ . l., 8-sporis, paraphysatis; sporidiis oblique monostichis navicularibus, obtusiusculis, atris, 15-16 \times 6-7.

Hab. in truncis Calami sp., Luzon, Prov. Bataan, Lamao River, Ins. Philippin. (COPELAND).

41. *Xylaria bataanensis* P. Henn., Hedwigia XLVII (1908) p. 260. 4517
— Stromatibus cylindraceo-fusiformibus, stipitatis, cæspitosis vel irregularibus, clavula usque ad 2,5 cm. longa, 1,5-3 mm. crassa, apiculata v. rostrata, striatula, ostiolis prominulis; stipite tereti, æquali, usque ad 1 cm. longo, 0,5-1 mm. lato; ascis pedicellatis, 80-100 \times 5-6,5, 8-sporis, paraphysatis; sporidiis oblique monostichis navicularibus, atris, obtusis, 10-14 \times 4-5,5.

Hab. in ligno putrido, Luzon, Prov. Bataan, Lamao River Ins. Philippin. (MERRILL, COPELAND).

42. *Xylaria Fioriana* Sacc., in Ann. Mycol. VIII (1910) p. 337. — 4518
Laxe gregaria v. sparsa, parvula, solitaria, rarius individuis 2-3 basi connexis, tereti-cuspidata, tota castaneo-nigra, apice acuta sterili, 10-15 mm. alta, 1,5 mm. cr., stipite deorsum leniter sensim incrassato, nigro-hirtello, dein glabrato, 2-6 mm. longo; parte perithecigera 4-6 mm. longa, initio nigro-hirtella; peritheciis minutis globoso-conicis, 200 μ . diam., prominentibus, basi insculptis; ascis sporidiis (propriis, ut videtur), oblongo-ellipsoideis, fuliginis, 11 \times 4.

Hab. in trunco putri Euphorbiæ abyssinicæ sec. torrentem Messeb, alt. 1300 m. Mensa (ADR. FIORI) et prope Filfit Ery-

thrææ (L. SENNI). — Ab affini *X. riograndensi* Theiss. differt, stipite deorsum evidenter incrassato, atro-brunneo-hirtello, peritheciis prominentibus (numquam immersis), statura majori etc. Conidia non visa. Clavulæ indivisæ, rarissime furcatæ, sursum sæpius arcuatæ.

43. *Xylaria corniculata* Sacc., Myc. cong. novi, Ann. Myc. v. IV 4519 (1906) p. 75, tab. II, fig. 9. — Fasciculata, versiformis, tota nigricans, coriacea, intus compacta albida, 2-4 cm. alta; stipite cylindræo, e velutino glabrato, 1-2 cm. longo, 2,5-3 mm. cr., in clavulas seu ramos 2-4 modo cylindræos, modo dilatato-compressos abeunte; clavulis rugosis et asperulis, apicibus acutis corniculatis sterilibus; peritheciis immersis, globosis, nigris, vix 0,5 mm. diam., ostiolis latentibus; ascis cylindræis p. sporif. 110-130 \times 8-9; sporidiis ovoideo-oblongis, utrinque rotundatis, leviter inæquilateris, 18-20 \times 9-10, atro-fuligineis.

Hab. ad truncos, Kisantu, Congo Africæ (J. GILLET). — Affinis videtur *X. digitatæ* sed satis dignoscitur clavulis sæpe dilatato-compressis, superne bicorniculatis, stipite velutino etc.

44. *Xylaria capillacea* Sacc., Myc. cong. novi, Ann. Myc. IV (1906) 4520 p. 76, tab. II, fig. 11. — Dense cæspitoso-fasciculata, tota 6 cm. alta; stromatibus conidiophoris usque ad medium indivisis, cylindræo-filiformibus, nigris, pilis patentibus crebris hirsutis, sursum in ramulos filiformi-capillaceos, tortuosos, glabros, pallidiores, conidiophoros partitis; conidiis oblongo-ellipsoideis, hyalinis, 5-6 \times 2,5; stromatibus ascophoris intermixtis (an semper a conidiophoris separatis?), brevioribus; stipite hirsuto 10-15 mm. longo, 0,5-1 mm. cr., clavula simplici, cylindræa, torulosa, 4-5 mm. longa, 1,5 mm. cr., ostiolis minute papillatis asperula, nigricanti, glabra, mucrone brevi acuto terminata; ascis cylindræis breve stipitatis p. sporif. 60-70 \times 4-5; sporidiis ovoideo-oblongis, utrinque obtusulis, leviter inæquilateris, 9,5-11 \times 4, atro-fuligineis.

Hab. in fructibus putrescentibus dejectis Cassiæ (Cathartocarpi) fistulæ vel affinis, Kisantu, Congo Afric. (J. GILLET). — Affinis videtur *X. janthino-velutinæ*, sed ramulis capillaceis, stromatibus fertilibus a sterilibus, ut videtur, separatis dignoscitur.

45. *Xylaria brachiata* Sacc. Myc. cong. novi, Ann. Myc. v. IV (1906) 4521 p. 75, tab. II, fig. 8. — Longe stipitata, solitaria; stipite anguste cylindrico, 6 cm. alto, 1-1,5 mm. cr., nigricante, hirtello, sæpe e medio arrecto-furcato; ramo altero sterili, altero clavuligero; clavula fusioidea summo apice acuta et sterili, 10-12 mm. longa,

2-3 mm. cr., nigricanti, vix minute rimuloso-rugosula, intus alba et partim cava; ostiolis latentibus; peritheciis crebris, globosis, immersis, nigris, vix 0,5 mm, diam.; ascis cylindraceutis, p. sporif. 85 100 \approx 8-9; sporidiis oblongo-ovoideis, leviter inæquilateris, utrinque obtusis, atro-fuligineis, 12-14 \approx 5-5,5.

Hab. ad truncos, Kisanu, Congo Africae (J. GILLET). — Stipite longo e medio furcato, clava minuta sublevigata satis distinguitur species.

Fam. 5. Valsacæ

Sect. 1. Allantosporæ.

CALOSPHÆRIA Tul. — Syll. I p. 95, IX p. 477, XI p. 272; XIV p. 479, XVI p. 419, XVII p. 561.

1. *Calosphæria benedicta* Rehm in Strasser, Verh. k. k. zool.-bot. 4522 Gesellsch. Wien LVII (1907) p. 322. — Peritheciis gregariis sub cortice extus pallide griseo-maculato intus immutato nidulantibus, 10-12 valsiformibus, globosis, 300-400 μ . diam., supra collo filiformi usque ad 600 μ . longo, apice obtuso ruguloso usque ad 100 μ . cr. erumpentibus; ascis fuscoideis, sessilibus, 40 \approx 10, octosporis; sporidiis cylindraceutis, curvulis, unilocularibus, hyalinis, 12-15 \approx 3, tritichis; paraphysibus tenuissimis, septatis, usque ad 3 μ . cr.

Hab. in cortice sicco Piri Mali, Sonntagberg Austriae inf. (STRASSER). — A *C. Aceris* sporidiis majoribus differt.

2. *Calosphæria pleurostoma* Chenant. in Bull. Soc. Sc. Nat. Ouest 4523 France (1910) p. 16, t. IV, f. 1. — Peritheciis immersis v. sæpius liberis, inordinate aggregatis v. circinantibus, pseudostromate carbonaceo-spongioso connexis, nigris v. brunneis, e levigato verruculosis, ostiolis conicis v. cylindraceutis, horizontaliter protractis et matriçi adhaerentibus, subinde flexuosis, peritheciæ diametrum æquantibus v. longioribus; ascis clavatis, apice rotundatis, deorsum sensim tenuatis, subsessilibus, paraphysibus asco duplo longioribus, crassis, articulatis, articulis 2-guttatis; sporidiis distichis, allantoides, hyalinis, 6-7 \approx 1,5-1,7.

Hab. in ramis Piri Mali, Bagatelle pr. Morlaix Galliae. — Ad *Wegelinam* nutat.

EROSTELLA (Sacc.) Trav. Fl. ital. Crypt. Fungi, Pyren. fasc. I (1906) p. 155, *Calosphaeria* subgen. *Erostella* Sacc. — Syll. I, pag. 101 (1882) *Togninia* Berl., Icon fung. III, p. 9 (1900).

1. *Erostella minima* (Tul.) Trav., loc. cit. (1906) p. 156. — Ita vo- 4524
canda *Calosphaeria minima* Tul., *Togninia minima* Berl.
2. *Erostella Rhododendri* (Rehm) Sacc. et Trott., *Togninia Rhodo-* 4525
dendri Rehm, Ann. Mycol. V (1907) p. 536. — Peritheciis 4-6
in acervulos orbiculares collectis, cortice interiore pustulatim inflato,
haud mutato tectis, denique epidermide ostiolis minimis valsifor-
miter perforata conspicuis, monostichis, circinantibus, globulosis,
ca. 0,3 mm. diam.; ascis clavatis, tenerrimis, usque ad $60 \approx 5$, octo-
sporis; sporidiis oblongis, 1-cellularibus, rectis, hyalinis, $8 \approx 2$, di-
stichis; paraphysibus nullis.

Hab. in ramulis *Rhododendri* hirsuti ad viam inter
Schlehdorf et montem Herzogenstand alpium Bavarie (Dr. REHM).

3. *Erostella transversa* Sacc. et Fairm. in Saccardo, Microm. Amer. 4526
novi, Journ. of Myc. v. XII (1906) pag. 48. — Peritheciis inter
librum et periderma evolutis et rima transversali crassiuscule mar-
ginata circ. 2 mm. longa erumpentibus sed non emergentibus, in
quoque acervulo 4-6, globulosis, 500-750 μ . diam., peridermate
secedente subliberis et sæpe collapsis-concavis, glabris, nigris, col-
lis brevissimis, ostiolis obtusis; ascis clavatis, subsessilibus sed deor-
sum tenuatis, apice rotundatis, $44-48 \approx 5,5-6$, octosporis; paraphy-
sibus filiformibus,asco multo longioribus, minute guttulosis; spo-
ridiis distichis allantoides, leviter curvis, $8-9 \approx 2,5$, perfecte hyalinis.

Hab. in cortice *Betulae* sp. in silvis pr. Lyndonville, Sept.
1905. — Ab *Erostella vasculosa* Sacc. et *E. ambigua* (Berl.) Sacc.
differt sporidiis brevioribus, angustioribus, peritheciis rimose trans-
verseque erumpentibus, etc.

QUATERNARIA Tul. — Syll. I p. 106, IX p. 449, XVI p. 422.

1. *Quaternaria chilensis* Speg., Fungi Chilenses (1910) p. 28, cum 4527
icon. — Stromatibus subhemisphaericis innato-erumpentibus extus
carbonaceis intus pulchre viridibus; peritheciis 3-4-circinantibus
mediocribus brevissime ruguloseque ostiolatis, globosis, 200 μ . diam.;
ascis clavulatis octosporis, aparaphysatis, parte sporifera $40 \approx 5$;
sporidiis cylindraceis, curvulis, $8-12 \approx 2-2,25$, subchlorinis.

Hab. in ramos emortuos *Lithrae* causticae, Parque de
Lota Chile Amer. austr.

Syll. fung. XXII (VIII-1912)

VALSA Fr. — Syll. I p. 108, IX p. 449, XI p. 273, XIV p. 481, XVI p. 422, XVII p. 562.

1. *Valsa rhodospora* Sacc., Not. Myc. VII, Ann. Myc. IV (1906) p. 275. — Acervulis cortice nidulantibus creberrimis et plerumque confluentibus, irregulariter circinantibus; peritheciis globulosis, nigricantibus, sæpe et varie collabescentibus, 300-400 μ . diam.; collis brevibus; ostioliis vix erumpentibus et discum minutum nigrum sæpe obsoletum formantibus; contextu celluloso, firmulo, fuligineo; ascis fusiformibus, sessilibus, 42-50 \times 9-11, apophysatis, octosporis; sporidiis distichis, allantoideis, utrinque rotundatis, ex hyalino dilutissime roseis, 17-18 \times 3, facile eructatis et in massulas irregulares roseas superficiales coalescentibus. 4528

Hab. in corticibus atratis ramorum majorum *Aceris* sp., Lyndonville New York Amer. bor. (C. E. FAIRMAN). — Species sporidiis exsiliantibus roseis mox dignoscenda. Est affinis *V. ambienti*, a qua præterea recedit acervulis creberrimis, ostioliis minus conspicuis et peritheci contextu firmiore, et ex cellulis, ut videtur, minus sinuosis formato.

2. *Valsa amphibola* Sacc., Ann. Mycol. VI (1908) pag. 560. — Stromatibus gregariis, pulvinato-verruciformibus, cortice nidulantibus mox erumpentibus et prominentibus, 1-1,4 mm. diam., disco subcirculari, applanato, albido, ostioliis globulosis, nigris, sæpius periphericis punctato; peritheciis globulosis, monostichis, nigris 300 μ . diam.; collis cylindricis longiusculis; ascis late clavatis, subsessilibus, basi acutatis, apice rotundatis, 45-55 \times 8, apophysatis, octosporis; sporidiis distichis v. partim oblique monostichis, allantoideis, 12-14 \times 2,5, hyalinis, curvulis. 4529

Hab. in ramis radicalibus epigæis Piri Mali, Tamsel Germaniæ (P. VOGEL). — Stromatis substantia interior a corticali vix distinguenda et nulla linea nigra stromatica circumscripta; hinc species ob discum ad subgen. *Leucostomam* vergit, ob defectum vero lineæ stromaticæ ad *Euvalsam*. Habitus fere *Eutypellæ* sed ascii sessiles etc.

3. *Valsa Eucalypti* Cooke et Harkn. — Syll. I, p. 127 — var. *Myrti* Roll. Bull. Soc. Myc. Fr. (1905) p. 22. — Pustulis rotundis v. oblongis, elevatis, epidermide cinctis, parallele gregariis, 1-2 mm. lat., pro more 20 perithecia includentibus; peritheciis minutis, nigris 0,25 mm. latis; stipatis; ostioliis curtis, sæpe coalitis, exertis, atro-nitidis, supra gibbosis; ascis ; sporidiis cylindræis, utrinque rotundatis, rectis curvulisve, 6-8- rarius 10 \times 1,5. 4530

Hab. in ligno Myrti communis, Sa Coma in insulis Balearibus.

4. *Valsa Yerbæ* Speg., Annal. Mus. Nac. Buenos Aires t. XVII (1908) 4531 p. 118. — Acervulis cortice innatis sparsis v. laxe gregariis; stromate nigro lenticulari, 0,75-1,50 mm. diam.; peritheciis 3-7, globosis, 350-400 μ . diam., membranaceis, olivaceis, ostioliis conniventibus vix exertis; ascis clavulatis, aparaphysatis, pedicello mox fluxili suffultis, octosporis, p. spor. 12-15 \times 3-4 pedicello 20-25 μ . longo; sporidiis conglobatis cylindraceis utrinque obtusis, 3-4 \times 1, e hyalino subchlorinis, minute uniguttulatis.

Hab. ad ramos emortuos Ilicis paraguariensis, Rep. Argentina Amer. austr.

5. *Valsa Myricæ* Jaap, Abh. Bot. Ver. Prov. Brandenb., II (1907) 4532 p. 17. — Stromatibus gregariis, totum ramum sæpe obtegentibus, rotundatis, 1-2 mm. latis, pustuliformibus, cortice nidulantibus, rostello parvo rotundato erumpentibus; peritheciis plerumque circumstantibus, immersis, depresso globosis, circ. 0,3 mm. latis, ostioliis confluentibus præditis, plerumque 3-6 in quoque stromate; ascis clavatis, sessilibus, quandoque basi tenuiter angustatis, supra rotundatis, 54-65 \times 7,5-9, tetrasporis; sporidiis cylindraceis, curvis, rotundatis, hyalinis, 18-24 \times 4-5, sæpe minute et plus minus distincte uniguttulatis, oblique monostichis.

Hab. in ramulis siccis Myricæ Gale prope Geesthacht Hamburg Germania. — Socia adest plerumque *Cytospora Myricæ* Jaap.

6. *Valsa Juglandis* (Schw.) Curr. Trans. Linn. Soc. London XXII 4538 (1858) p. 279 (n. 154) t. 48, f. 145, non *Sphaeria Juglandis* Fr. (quæ *Diplodia*). — Stromatibus et peritheciis generis (non descriptis); ascis octosporis; sporidiis distichis, flavidis, 7,5-10 \times 1,7-2.

Hab. in ramis Juglandis sp. in America boreali.

7. *Valsa Humboldtiana* Starb., Ascom. Schwed. Chaco-Cordill. Exp. 4534 Arkiv f. Bot. Bd. V (1905) p. 27. — Stromatibus dense sparsis, cortice immersis, conicis, disco sordide albido, peridermio adherente vix emergentibus, ad basim vix $\frac{1}{2}$ mm. diam.; peritheciis paucis, 6 in quoque stromate, plerumque orbiculatim ordinatis, ellipsoideo-cylindraceis, sensim in colla ore minutissimo pertusa, prominentia attenuatis, atris, minutissimis; ascis octosporis, anguste clavatis, 45-50 \times 6,5-7,5; sporidiis conglobatis, allantoides v. fere cylindricis, 10-15 \times 2,5.

Hab. in ramulis aridis Salicis Humboldtianæ, Tarija,

Bolivia. — *V. salicinae* (Pers.) Fr. affinis, omnibus partibus minoribus diversa.

8. *Valsa chlorina* Patouill., Bull. Soc. Mycol. de Fr. XXII (1906) 4585 p. 56. — Pustulis gregariis, numerosis, ellipticis, epidermide lac-rata cinctis, vix 1 mm. long., disco plano nigricante; peritheciis 3-7 in stromate granuloso luteo-viridi dein atro nidulantibus, globosis v. ovoideis, atris, coriaceis, 150-180 \times 160, nucleo albo in collum 90-180 μ . long., 60 μ . cr., attenuatis, ostiolis atris exsili-entibus; ascis cylindraceis vix stipitatis, 25-30 \times 5, octosporis; spori-diis distichis, rectis v. leniter curvulis, continuis, hyalinis, 5-6 \times 2.

Hab. in pericarpio *Cocos nuciferae*, Papenoo Polynesia.

EUTYPELLA (Nits.) Sacc. — Syll. I p. 145, IX p. 460, XI p. 274, XIV p. 484, XVI p. 423, XVII p. 564.

1. *Eutypella Prunastri* (Pers.) Sacc. — Syll. I, p. 147 — f. *Cratægi* 4586 Rehm, Ascom. exsicc. fasc. 46, n. 1894, Ann. Myc. VIII (1910) pag. 302. — Stromatibus intus albo-pruinosis; ascis 30-40 \times 5-7; sporidiis 10-12 \times 2,5-3.

Hab. in ramis *Cratægi Oxyacanthæ* prope Weismain in Oberfranken Germaniæ. — Ab *Eut. Cratægi* Berl. satis differt notis allatis.

2. *Eutypella Gleditschiæ* Berlese, Ic. fung. III, p. 73, t. 75, f. 3. — 4587 Stromate late effuso, copioso, crustaceo, atro, per corticem interio-rem serpente et haud raro ligno adnato, circa acervulos elevato, eosque ambiente et peridermium attingente; acervulis gregariis subinde confluentibus, tumidis, verruciformibus, orbicularibus, pe-ridermio laciniato cinctis, intus albo-pruinosis; peritheciis in quo-que acervulo sat numerosis, monostichis, in colla breviter attenuatis, pruina immersis, globuloso-ovoides, haud raro mutua pressione compressis, ostiolis discretis, parum exertis, 2-4-sulcatis, nigris; ascis clavatis, parte sporif. 35-40 \times 6-8; sporidiis allantoides, 10-12 \times 2, pallide chlorino-luteolis.

Hab. in ramis exsiccatis *Gleditschiæ Triacanthi* in agro Veneto Ital. bor. — Ab *Eutypa ludibunda* acervulis bene definitis dignoscenda. *Eutypellæ Cratægi* affinis. Etiam *Eutypa leprosa* — Syll. I, p. 167 — teste cl. Berlese l. c. est potius *Eutypellæ* sp.

3. *Eutypella Stenocalycis* Syd., Hedwigia XLIX (1909) pag. 80. — 4588 Acervulis gregariis, plerumque rotundatis, pulvinatis, peridermio rupto cinctis, c. 1-1,5 mm. diam., cortice duriore immersis; peri-theciis in quoque acervulo plus minusve numerosis, plerumque

4-10, subglobosis, minutis, collis minutis crassiusculis subconvergentibus præditis; ostiolis obtusis, distincte 4-sulcatis; ascis fusoides, longe stipitatis, octosporis, p. sporif. $22-30 \times 4-6$; sporidiis superne in asco distichis, inferne monostichis, allantoideis, obtusis, fusciculis, $6-8 \times 2$.

Hab. in ramis *Stenocalycis brasiliensis*, Para Americæ austr. (C. F. BAKER).

4. *Eutypella chilensis* Speg., *Fungi chilenses* (1910) p. 29. — Erum- 4539
pens, parva, intus extusque nigra; peritheciis minutis dense constipatis brevissime ostiolatis, subglobosis, $120-150 \mu$. diam.; ascis clavatis aparaphysatis, parte spor. $40 \times 7-8$; sporidiis cylindraceis, curvulis, utrinque obtusis, $10-12 \times 2,25-2,50$, chlorinis.

Hab. in ramis emortuis *Eugeniæ multifloræ*, Cerro Caracol de Concepcion Chile Amer. austr.

5. *Eutypella citricola* Syd., *Hedwigia* XLIX (1909) p. 80. — Acer- 4540
vulis gregariis, rotundatis, pulvinatis, $\frac{3}{4}-2$ mm. diam., peridermio rupto arcte cinctis; peritheciis plus minus numerosis in quoque acervulo, minutis, subglobosis, collis brevibus crassiusculis præditis; ostiolis obtusis, 4-sulcatis; ascis fusoides, longe stipitatis, p. sp. $30-35 \times 4-5$, octosporis; sporidiis subdistichis, allantoideis, utrinque obtusis, fusciculis, $6-8 \times 2$.

Hab. in ramis *Citri Aurantii*, Parà, Brasilia (C. F. BAKER).

6. *Eutypella Murrayæ* Syd., *Hedwigia* XLIX (1909) p. 80. — Acer- 4541
vulis gregariis, rotundatis vel oblongis, peridermio rupto cinctis, ca. $\frac{1}{2}-1$ mm. longis; peritheciis plerumque 4-8 in quoque stromate, subglobosis, minutis, collis minutis, crassiusculis præditis; ostiolis obtusis, 4-sulcatis; ascis fusoides, longe stipitatis, octosporis, p. sp. $20-30 \times 5-6$; sporidiis superne in asco distichis, inferne monostichis, allantoideis, obtusis, fusciculis, $5-7 \times 2$.

Hab. in ramis *Murrayæ exoticæ*, Parà, Brasilia (C. F. BAKER).

7. *Eutypella Cordiæ* Syd., *Hedwigia* XLIX (1909) p. 80. — Acer- 4542
vulis gregariis, minutis, rotundatis vel irregularibus, $\frac{1}{2}-1$ mm. diam., peridermio rupto cinctis; peritheciis plerumque 4-8 in quoque acervulo, minutis, ovato-globosis, collis brevibus crassiusculis subconvergentibus præditis; ostiolis obtusis 4-sulcatis; ascis fusoides, longe stipitatis, p. sp. $30-35 \times 4-5$, octosporis; sporidiis distichis, allantoideis, utrinque obtusis, fusciculis, $6-8 \times 2-2\frac{1}{2}$.

Hab. in ramis *Cordiæ umbraculiferæ*, Parà, Brasilia (C. F. BAKER).

8. *Eutypella Cocos* Ferdinand. et Winge, Vidensk. Meddel. fra den 4543
 naturh. Foren. i Kiøbenhavn (1908) p. 141, tab. IV, fig. 1. —
 Stromatibus e basi irregulariter orbiculari subpulvinatis, 0,5-1 mm.
 diam., atris, in strato exteriori lignoso epicarpii primo immersis,
 deinde epidermidem pustuliformiter levantibus, ostiolis fere solis
 erumpentibus, ceterum velatis, densiuscule sparsis, v. in plagulas
 circ. 1 cm. diam. confluentibus; peritheciis in singulo stromate
 1-20 (plerumque circ. 10), monostiche v. rarius subdistiche stipa-
 tis, 200-300 μ . diam., forma varia, oblongis, subsphæroideis vel
 parum applanatis, collo pro situ plus minusve longiore instructis;
 ostiolis inter se liberis, cylindraceis, apice rotundatis, non sulcatis,
 longitudine plerumque 200-300 μ , 75-100 μ . lat.; ascis anguste cla-
 vatis, superne rotundatis, subsessilibus, parte sp. 18-24 \times 3,5-4,5,
 J -; sporidiis octonis, irregulariter distichis v. subconglobatis, al-
 lantoideis, continuis, hyalinis, leniter curvulis, 4-5 \times 1; paraphysi-
 bus evanidis, ægre conspicuis, ascos longe superantibus (ad 125
 μ . long.).

Hab. in epicarpio sicco *Cocos nucifera* L. in insula St.
 Croix Indiæ occidentalis (F. BOERGESEN).

9. *Eutypella Longiana* Rehm, Ann. Mycol. V (1907) p. 516. — Stro- 4544
 matibus gregariis, primitus peridermio innatis, dein prorumpenti-
 bus, atris, demum fere sessilibus, semiglobosis, 2 mm. diam.; pe-
 ritheciis 4-6 monostichis, globulosis, 0,3 mm., collis convergenti-
 bus, ostiolis cylindraceis brevibus, subsulcatis; ascis fusiformibus,
 longe stipitatis, p. sporif. 25 \times 6, 8-sporis; sporidiis allantoideis,
 curvatis, flavidulis, 8-10 \times 2-2,5; paraphysibus nullis.

Hab. ad ramulum? Texas (W. H. LONG jr., comm. ATKINSON).
 — Affinis *Eutypellæ radulae* (B. et Curt.) Berl.

VALSELLA Fuck. — Syll. I p. 158, IX p. 464, XI p. 275, XVII
 p. 567.

1. *Valsella Cratægi* Jaap in Abhandl. Bot. Verein Brandenb. LII 4545
 (1910) p. 148. — Stromatibus gregariis, ramum late obtegentibus,
 e cortice pustulatim elevato erumpentibus; peritheciis numerosis,
 5-12 parum prominentibus, nigris; ascis cylindraceo-clavatis, ses-
 silibus 45-60 (plerumque 50) \times 5-7, demum usque ad 70 μ . long.;
 sporidiis cylindraceis, rotundatis, parum incurvatis, utrinque uni-
 guttulatis, 5-8 \times 1-1,5.

Hab. in ramis siccis *Cratægi Oxyacanthæ*, prope Triglitz
 in Germania. — *Vals. Salicis* Fuck. affinis.

2. *Valsella alnicola* Berl. Icon. fung. III, p. 107, t. 133, f. 2, *Val-* 4546
sella furva Berl. et Bresad. Microm. trid p. 13, t. I, f. 4, non
 Karst. — Stromatibus conico-truncatis, peridermio leviter pustul-
 latim inflato tectis, disco minuto fuscescente; peritheciis circinan-
 tibus majusculis, collis brevibus ornatis, ostioliis integris discum
 vix superantibus; ascis clavatis in stipitem crassiusculum ascos
 longitudine æquantem tenuatis, polysporis, p. sporif. 45-55 \times 10-
 13; sporidiis dense conglobatis, allantoideis, curvulis, 5-7 \times 1-1,5
 melleis.

Hab. in ramis Alni glutinosæ emortuis prope Trento in
 agro Tridentino. — A *Valsella furva* Karst. differt stromatibus
 et peritheciis duplo majoribus, ascis quoque majoribus, sporidiis
 melleis etc.

3. *Valsella Pinangæ* Syd., Ann. Mycol. VIII (1910) p. 36. — Stro- 4547
 matibus gregariis, subinde lineariter dispositis, hemisphæricis vel
 ellipticis, 1-2 mm. longis, per peridermium erumpentibus et ejus
 laciniis cinctis; peritheciis 5-8 in quoque stromate, subcircinanti-
 bus, subsphæroideis, ostioliis atris, opacis; ascis anguste clavatis,
 apice rotundatis, sessilibus, polysporis, 60-85 \times 10-14; sporidiis con-
 fertis, cylindraceis, rectis vel lenissime curvulis, hyalinis, 6-8 \times
 1-1 $\frac{1}{2}$.

Hab. ad truncos corticatos Pinangæ, Manila, insul. Philipp.
 (E. D. MERRILL).

EUTYPA Tul. — Syll. I p. 145, IX p. 460, XI p. 274, XIV p. 484,
 XVI p. 423, XVII p. 564.

1. *Eutypa paraphysata* Speg., An. Mus. Nac. Buenos Aires t. XIX 4548
 (1909) p. 331. — Acervulis ligno denudato dealbatoque seriatim
 erumpentibus, intus extusque nigris; peritheciis dense constipatis
 carnosulo-membranaceis 120-130 μ d., olivaceis, in ostiolum nigrum
 breve, crassum, stellatim rugosum productis; ascis parte sporifera
 subfusioidea 50 \times 6 in pedicellum æquilongum, 40-60 \times 2-3 productis,
 paraphysibus prælongis crassiusculis cinctis; sporidiis octonis vix
 curvulis, utrinque obtusiusculis atque minute 1-guttulatis, 8-10 \times
 2-2,5 chlorinis.

Hab. ad ramos cariosos Acaciæ melanoxyli, La Plata
 Rep. Argentina Amer. austr.

2. *Eutypa Tessariæ* Starb., Ascom. Schw. Chaco-Cordill. Exp., Ark. 4549
 f. Bot., Bd. V (1905) p. 27. — Stromatibus corticalibus, ex ma-
 trice in substantiam carbonaceam mutata formatis, longe effusis,

irregulariter determinatis, tenuibus, lignum maculis linea nigra limitatis inficientibus; peritheciis densissime constipatis, monostichis, sphaerioideis vel mutua pressione angulatis, ostioliis breviusculis, conicis, latis, tri-quadrignonis vel plerumque irregulariter gibberosius ornatis, conico-prominulis, ad basim concretescentibus, sæpe ad verticem inter se liberis, 200-250 μ . diam.; ascis octosporis, clavatis, longiuscule pedicellatis, 20-30 \times 5-6 (p. sp.); sporidiis conglobatis, allantoideis, olivascentibus, 7,5-10 \times 2,5.

Hab. in caulibus *Tessariæ integrifoliæ* «bubun» nominatæ, ad Rio Pilcomayo Boliviae. — Species ostioliis irregularibus distincta videtur.

3. *Eutypa lata* (Pes.) Tul. — Syll. I, p. 170 — var. *andina* Speg., 4550 An. Mus. Nac. Buenos Aires t. XIX (1909) p. 331. — Stromatibus sæpius linearibus; peritheciis 250-300 μ . diam.; ascis subclavulatis 75-100 \times 5-7; sporidiis 10-12 \times 2.

Hab. ad ramos emortuos *Tricyclæ spinosæ* in præandinis Cacheuta, prope Mendoza, Rep. Argentina Amer. austr.

4. *Eutypa caulivora* Massee in Bancroft Handb. Diseas. West India 4551 Plants (1910) p. 22, t. III, f. 1-2 (habitus). — Ab *Eutypa erumpente*, cui habitu similis, differt caractere sporarum.

Hab. in caulibus *Para rubber* (quid?) cui plagas nigras superficiales affert in Ind. occid. — Sporidia non descripta!

5. *Eutypa bacteriospora* Rehm, Ascom. exsicc. fasc. 41, n. 1759, 4552 Ann. Mycol. VI (1908) p. 118. — Stromate late effuso, epidermide plus minusve denigrata tecto, tenuissimo, nigro; peritheciis ligno intus linea tenuissima nigra circumscripto immersis, globosis, dispersis, 0,5-1 mm. diam., in collum longum abeuntibus, itaque intra epidermidis rimas transversas 2-4 confluentibus tuberculariformiterque congregatis prominentibus, ostioliis plerumque minutis interdum usque ad 0,5 mm. cylindraceo-elongatis; ascis clavulatis, longe tenuiter stipitatis, p. spor. 15 \times 5, octosporis; sporidiis allantoideis, curvatis, unilocularibus, utrinque uniguttulatis, dilutissime flavidulis, 4 μ . long., 1,5 μ . lat.; paraphysibus?

Hab. ad ramulos plantæ scandentis, Sao Leopoldo Rio Grande do Sul Brasiliæ (Rick). — Ab *E. atomospora* (Cooke) Sacc., peritheciis ligno profunde immersis præcipue differt.

6. *Eutypa ludibunda* Sacc. — Syll. I, p. 177. — 1. f. *Anonæ Chermoliæ* Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 330. — Acervulis corticulis noduloso-prominulis extus sordide nigris, ostioliis brevibus crassis stellato-rimosis ornatis, intus candidis; perithe-

ciis dense constipatis mediocribus 200 μ . diam.; ascorum parte sporifera subcylindræa 30 \times 4-5, pedicellum gracilem æquante, paraphysibus nullis; sporidiis vix curvulis. — 2. f. **Casuarinæ strictæ** Speg., l. c. — Acervulis ligno denudato superficialibus irregulariter nodulosis extus intusque nigris; peritheciis polystichis subcarbonaceis 180 μ . diam.; ascorum parte sporifera subfusoidea 40-50 \times 5, pedicello gracili duplo brevior suffulta, paraphysibus nullis; sporidiis vix curvulis 10 \times 2-2,5 chlorinulis. — 3. f. **Luheæ grandifloræ** Speg., l. c. p. 330. — Corticola, dense congesta, latissime ambiens intus extusque atra; peritheciis mediocribus 180-200 μ . diam.; ascorum parte sporifera subclavulata, 50-55 \times 10 deorsum in stipitem gracilem vix longiorem productis, paraphysibus nullis; sporidiis leniter curvulis 10-12 \times 3 e hyalino subchlorinis. — 4. f. **Macluræ aurantiacæ** Speg., l. c. p. 300. — Acervulis et peritheciis ut in præcedenti; ascorum parte sporifera 40-45 \times 5, pedicello vix brevior suffultis, paraphysibus nullis; sporidiis leniter curvulis 10 \times 2, chlorinulis. — 5. f. **Ricini communis** Speg., l. c. p. 331. — Stromatibus effusis totam matricem nigrificantibus; peritheciis subeutypeis laxiuscule gregariis 150-200 μ . diam., ascorum parte sporifera subcylindræa 50 \times 6-7 pedicello subtriplo longior impositis, paraphysibus nullis; sporidiis rectiusculis 10-12 \times 2, subhyalinis. — 6. f. **Solani verbascifolii** Speg., l. c. p. 331. — Acervulis et peritheciis ut in f. tertia; ascis sporidiisque ut in præcedenti. — 7. f. **Tamaricis africanæ** Speg., l. c. p. 331. — Acervulis et peritheciis ut in forma secunda, ascis et sporidiis ut in præcedenti.

Hab. f. 1 prope Tucuman, f. 2, 3, 6 prope Santa Catalina, f. 4 prope Marmol, f. 5, 7 prope La Plata, Rep. Argentina America austr.

7. **Eutypa linearis** Rehm, Ann. Mycol. V (1907) p. 523. — Stromatibus linearibus, parallele seriatis, rectis, epidermide tectis, dein ea nigrificata et longitudinaliter discissa, elevatis, utrinque marginaliter obtectis, 0,5-3 cm. longis, vix 1 mm. latis, extus atris; peritheciis arcte monostiche aggregatis, globulosis, minutissime papillulatis, contextu parenchymatico membranaceo, fusco, glabris, ca. 250 μ . diam., sub cortice liberis; ascis fusiformibus longissime tenuiter stipitatis, p. sporif. ca. 60 μ . longa, 8-sporis; sporidiis allantoides, curvatis, utrinque obtusis, 1-cellularibus, hyalinis v. dilutissime flavidulis, 5-7 \times 2, di-tristichis; paraphysibus nullis.

Hab. in culmo Arundinariæ, Sao Leopoldo, Rio Grande do

Sul, Brasilia (RICK). — Affinis *Eutypæ phaselinae*, sed peritheciis in stromate laxioribus et vix papillatis distincta.

PERONEUTYPA Berl. — Syll. XVII p. 569.

1. *Peroneutypa heteracantha* (Sacc.) Berl. — Syll. XVII, p. 569 — 4555

1. f. *Arundinis Donacis* Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 329. — Ascis, parte sporifera, 14-20 \times 4-5; sporidiis 5-6 \times 1-1,25. — 2. f. *Anonæ Cherimoliæ* Speg., l. c. — Ascorum parte sporifera 15 \times 3-4; sporidiis 4-5 \times 1. — 3. f. *Casuarinæ strictæ* Speg., l. c. — Ascorum parte sporifera 15-18 \times 3-4; sporidiis 5 \times 1. — 4. f. *Ricini communis* Speg., l. c. — Peritheciis 400-800 μ . diam., ascorum parte sporifera 12-20 \times 5-7; sporidiis eximie curvulis 4-5 \times 1,25.

Hab. ad matrices indicatas, Rep. Argentina Amer. austr.

2. *Peroneutypa tuyutensis* Speg. — Syll. I, p. 163. — 1. f. *Abutilonis asiatici* Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 329. — Peritheciis maximis 750-1000 μ . diam.; ascorum parte sporifera 12 \times 3-4; sporidiis curvatissimis 4-5 \times 1. — 2. f. *Arundinis Donacis* Speg., l. c. — Cum præcedente omnino conveniens. — 3. f. *Chænocephali macrophylli* Speg., l. c. p. 330. — Peritheciis 150-300 μ . diam., ascorum parte sporifera 14-18 \times 4-5; sporidiis modice curvatis 4 \times 1. — 4. f. *Citri Limettæ* Speg., l. c. p. 330. — Præcedenti simillima; sporidiis valde curvatis 5 \times 1. — 5. f. *Phytolacæ dioicæ* Speg., l. c. p. 330. — Peritheciis 230-500 μ . diam.; ascis 15 \times 4; sporidiis validissime curvatis 4 \times 1. — 6. f. *Solani verbascifolii* Speg., l. c. p. 330. — Cum præcedente omnino conveniens.

Hab. formæ 1, 2, 5, 6 prope Santa Catalina, 3 prope Tucuman, 4 prope Orán, Argentina Amer. austr.

3. *Peroneutypa exigua* Syd., Hedwigia XLIX (1909) p. 81. — Stro- 4557

mate late effuso, crustaceo, peridermio tecto, nigerrimo; peritheciis cortici interiori immersis, sparsis vel sæpius pluribus (3-15) acervulato-collectis, globulosis, minutis, mono-distichis, in collum longiusculum productis; rostellis plerumque per rimam fasciculato-erumpentibus, rigidis, tereti-cylindræis, parallele erectis, c. $\frac{1}{2}$ - $\frac{3}{4}$ mm. longis, glabris, obtusis, aterrimis; ascis fusoideo-clavatis, apice rotundatis, basi in pedicellum longum attenuatis, p. sp. 11-16 \times 3-6, octosporis; sporidiis superne in asco distichis v. conglobatis, inferne monostichis, allantoideis, minutissimis, hyalinis vel dilutissime fusciculis, 3-3,5 \times 1-1,5.

Hab. ad corticem Citri Aurantii, Pará America austr. (C. F. BAKER).

4. *Peroneutypa valdiviana* Speg., Fungi chilenses (1910) pag. 29. — 4558

Stromate superficiem ligni late nigrificante; peritheciis globosis, 0,8-1,5 mm. diam., sparsis v. pauci-gregariis, ligno immutato infossis v. tantum insculptis vix papillato-ostiolatis; ascis pusillis clavulatis, 18×5 , octosporis; sporidiis cylindræis, guttulis, $5-6 \times 1$, curvulis, subchlorinis.

Hab. in ramis emortuis Aristotelie Macqui, Bahia de Corral Chile Amer. austr. — Affinis *P. heteracanthæ* (Sacc.).

5. *Peroneutypa cylindrica* (K. et C.) Berl. — var. *Euphorbiæ* Theiss. 4559

Beih. Bot. Centralbl. Bd. XXVII (1910) Abt. II, p. 401. — Peritheciis immersis, atris, 200-280 μ . diam., singulis v. geminatis, non vero fasciculatis, papilla cylindrica obtusata erecta, 380-460 μ . alt., 80-110 μ . cr. (v. obclavatis, basi c. 170 μ . supra 75-90 μ . cr.); ascis clavatis breviter pedicellatis, $24-27 \times 4$; sporidiis distichis, allantoidæis, hyalino-flavidulis, biguttulis, $4-5 \times 1$.

Hab. in caule sublignoso Euphorbiæ sp. Sao Leopoldo Rio Grande do Sul Brasilia (J. RICK).

6. *Peroneutypa asperima* Syd., in De Wildem., Flore du Bas- et 4560

Moy. Congo, t. III, fasc. I (1909) Extr. p. 15. — Stromatibus in cortice interiore late expansis, planis, 1-4 cm. longis, 1-2 mm. cr., effusis, sed bene limitatis, intus extusque atris, duris, ubique ostioli longè prominentibus crebris æqualiter distributis asperatis; peritheciis monostichis, subglobosis, c. 300 μ . diam.; ostioli rigidis, atris, glabris, c. 0,50-0,75 mm. longis; ascis clavatis v. fusoidæis, longè pedicellatis, p. sp. $16-20 \times 3-4$, octosporis; sporidiis allantoidæis, leviter curvulis, hyalinis, continuis, utrinque minute 1-guttulatis, c. $3,5 \times 1$.

Hab. ad cortices, Kisantu Congo Africæ (VANDERYST).

PERONEUTYPELLA Berl. — Syll. XVII p. 569.

1. *Peroneutypella corynostomoides* Rehm, Ascom. exsicc. fasc. 41, 4561

n. 1760, Ann. Mycol. VI (1908) p. 119. — Stromate late effuso, peridermio tecto, a corticis substantia heterogeneo, crustaceo, nigro, hinc inde circa perithecia acervulatim collecta parum elevato; acervulis gregariis, 1-2 mm. diam., vix tumidulis; peritheciis cujusque acervuli in hypodermio supra lignum nigro-cinctis, 10-15 rarius 1-5, globulosis, 0,5-0,7 mm. diam., collis longis, fasciculatim prorumpentibus, cylindræis, extra peridermium demum divergen-

tibus, scabriusculis v. rugulosis, interdum subconoideo-elongatis apiceque acutatis, ostiolis plerumque obtusis, 3-4 sulcatis, conoideis, 1-3 mm. long., 0,4 mm. lat., fusco-nigris; ascis clavatis, longe stipitatis, p. sporif. $25 \approx 6$, octosporis; sporidiis oblongis, obtusis, vix allantoideis, unilocularibus, uniguttulatis, subfuscis, $5-6 \approx 2$, distichis; paraphysibus filiformibus, septatis, 3 μ . cr.

Hab. ad ramum arboris frondosæ, Sao Paulo Rio Grande do Sul Brasilie (RICK). — *Per. corynostomæ* (B. et R.) Berl., affinis, sed differt stromatibus et peritheciis validioribus, sporidiis brunneis vix incurvatis.

2. *Peroneutypella applanata* Syd., in De Wildem., Flore Bas- et Moy. 4562 Congo t. III, fasc. I (1909) Extr., p. 16. — Stromatibus effusis, peridermio tectis, atris, carbonaceis, 3-8 mm. latis, $\frac{1}{2}-\frac{3}{4}$ mm. cr.; peritheciis hinc inde aggregatis, 1-2-stichis, globulosis, 0,2-0,3 mm. c. diam.; ostiolis numerosis, per peridermium erumpentibus, cylindraceis, glabris, rectis, c. 1,5 mm. longis, versus apicem subacutatis; ascis clavatis, p. sporif. c. $20 \approx 4$, octosporis; sporidiis oblongis, sæpe leviter curvulis, utrinque rotundatis minuteque guttulatis, hyalinis, continuis, c. $3,5-4,5 \approx 1,5-2$, distichis.

Hab. ad cortices, Kisantu Congo, Africæ (VANDERYST).

3. *Peroneutypella Noackii* Rehm, Ann. Mycol. V (1907) p. 523. — 4563 Stromatibus emergentibus, dein in cortice interiore libere sessilibus, gregariis, orbicularibus, semiglobosis, atris, carbonaceis, 0,5-1 cm. diam., 3 mm. alt., ostiolis plurimis cylindraceis, glabris, rectis, 2 mm. longis, versus apicem subacutatis obsessis, intus nigro-cinereis; peritheciis 2-3-stichis, globosis, plurimis, c. 0,3 mm.; ascis clavatis, p. sporif. $20 \approx 5$, octosporis; sporidiis cylindraceis, curvulis, hyalinis, 1-cellularibus, $4 \approx 1$ distichis; paraphysibus nullis.

Hab. in cortice arboris, Sao Francisco dos Campos, Prov. Sao Paulo Brasilia (NOACK). — Stromate ostiolis omnino cooperto et innumera perithecia fovente mox dignoscenda species.

4. *Peroneutypella obesa* Syd., in De Wildem. Flore Bas- et Moy. 4564 Congo t. III, fasc. I (1909) Extr. p. 16. — Stromatibus emergentibus, dein in cortice interiore libere sessilibus, gregariis, orbicularibus, semiglobosis, atris, carbonaceis, 0,8-1,5 cm. diam., usque ad 1 cm. altis, sæpe dense confertis et subconfluentibus, e mutua pressione angularibus, intus nigro-cinereis; peritheciis plurimis, 3-5-stichis, globosis, 0,5-0,6 mm. diam., ostiolis numerosissimis, cylindraceis, glabris, rectis, 2-4 mm. longis, versus apicem subacutatis; ascis fusioideo-clavatis, longe pedicellatis, p. spor. $10-12 \approx 4$,

octosporis; sporidiis minutissime allantoideis, hyalinis, continuis, utrinque minutissime 1-guttulatis, $2-2,5 \approx 1$.

Hab. ad cortices, Kisanu Congo, Africae (VANDERYST). — *A Per. Noacki* Rehm differt stromatibus majoribus, ostiolis magis elongatis et characteribus sporidiorum.

ENDOXYLA Fuck. — Syll. I p. 181, IX p. 469, XI p. 275, XVII p. 570.

1. *Endoxyla Yerbæ* Speg., Ann. Mus. Nac. Buenos Aires t. XVII 4565 (1908) pag. 118. — Peritheciis sparsis, ligno denudato immersis, stromate heterogeneo extus fuscescente, intus albescente linea nigra tenui limitato cinctis, globosis, $300-600 \mu$. diam., tenui-membranceis, fuscis, ostiolo brevissimo vix manifesto coronatis; ascis numerosis constipatis antice clavulatis, $14-16 \approx 3-4$, pedicello duplo longiore mox fatiscente suffultis, octosporis, aparaphysatis; sporidiis cylindraceis leniter curvulis utrinque obtusis $4-5 \approx 1$, hyalinis, minute uniguttulatis.

Hab. ad ramos emortuos decorticatos, Illicis paraguayensis in silvis circa San Pedro Argentinae Amer. austr.

2. *Endoxyla Mangiferæ* P. Henn., Hedwigia XLVII (1908) p. 258. 4566 — Stromatibus ligno innatis peritheciis gregariis immersis, atris, ostiolis subulatis superantibus; ascis stipitatis clavatis, 8-sporis, $30 \approx 6$; sporidiis subdistichis cylindraceis, curvatis, fusciculis, $6-7 \approx 2$.

Hab. in ligno emortuo *Mangiferæ* indicæ, Mindanao, Davao Ins. Philippin. (COPELAND).

CRYPTOSPHERIA Grev. — Syll. I p. 182, IX p. 470, XIV p. 486, XVI p. 426.

1. *Cryptosphaeria ? Cumingii* Speg., Fungi Chilenses (1910) pag. 82 4567 cum icon. — Peritheciis epidermide subrelaxata stromaticeque nigricata tectis, laxe gregariis, lenticularibus minutis carbonaceis, 150μ . diam.; ascis subcylindraceis modice attenuato-pedicellatis paraphysatis $65-70 \approx 7-8$; sporidiis subdistichis subfusoides, parvis, pallide olivaceis, 3-septatis leniter constrictulis, $16-18 \approx 4$, loculo medio supero non v. vix subcrassiore.

Hab. in culmis siccis putrescentibus *Chusqueæ* Cumingii Cerro Alegre de Valparaiso Chile Amer. austr.

2. *Cryptosphaeria curvispora* Starb., Ascom. Schwed. Chaco-Cordill. 4568 Exp., Arkiv f. Bot. Bd. V (1905) p. 28. — Stromate nullo, nisi matricis superficie ex fungillo obsesso paullum elevata indicato;

peritheciis discretis, interdum nonnullis confluentibus et acervulatum erumpentibus, plane in cortice immersis, basi non ligno affixis, globosis, ostiolis longiusculis, cylindricis, superne paulum dilatatis, 4-6-sulcatis vel potius verruculis 4-6 ornatis, ore latiusculo pertusis prominulis, membranaceis, atratis, 300-500 μ . diam.; ascis octosporis, clavatis, 10-15 \times 4-5 (p. sp.; sporidiis conglobatis, allantoideis, valde curvatis, fuscidulis, 2,5-3 \times 1,5; paraphysibus nullis.

Hab. ad ramos Soururo, inter Tarija et Chaco Boliviae. — Fungillus minutie partium interiorum nec non ostiolis mox dignoscendus.

CRYPTOSPHERELLA Sacc. — Syll. I p. 186, IX p. 470.

1. **Cryptosphærella Anonæ** Speg., An. Mus. Nac. Buenos Aires t. XIX 4569 (1909) p. 333. — Stromate latissime effuso, cortice immutato nidulante, ligno vix cinerescente insidenti; peritheciis hinc inde dense constipatis corticem subtumefacientibus carbonaceis tenuibus, e globoso ellipsoideis 300-500 \times 250-300, ostiolo minuto carbonaceo vix exerto coronatis; ascis 32-sporis, paraphysatis antice obtusiusculis postice modice graciliterque attenuato-pedicellatis, p. spor. 80 \times 15-20, ped. 30-40 \times 5; sporidiis leniter curvulis 12 \times 2,5-3 utrinque obtusiusculis, eguttulatis, chlorinis.

Hab. ad ramos dejectos putrescentes Anonæ Cherimoliæ prope Tucuman Argentina, Amer. austr.

2. **Cryptosphærella Mate** Spegazz., Ann. Mus. Nac. Buenos Aires 4570 t. XVII (1908) p. 119. — Stromatibus ligno denudato vii infusato prominulis, linearibus, colliculosis extus sordide pallescentibus; peritheciis minutis stromate hinc inde gregariis vix papillulato-ostiolatis, globosis 125-350 μ . diam.; ascis paraphysatis clavatis longe pedicellatis, parte spor. 75-80 \times 12, stipite longiusculo 75-100 μ . long., 32-48-sporis; sporidiis conglobatis e cylindraceo navicularibus, chlorinis, 8-16 \times 3, minute 1-guttulatis.

Hab. ad ramos aridos subputrescentes decorticatosque Illicis paraguariensis in dumetis prope San Pedro Argentina, Amer. austr.

CRYPTOVALSA Ces. et De Not. — Syll. I p. 187, IX p. 471, XI p. 276, XIV p. 487, XVI p. 426, XVII p. 567.

1. **Cryptovalsa chilensis** Speg., Fungi chilenses (1910) p. 30. — Pe- 4571 ritheciis dense constipatis numerosis carbonaceis subsuperficialibus

globosis parvis eximie breveque papillato-ostiolatis, 250-300 μ . diam.; ascis clavulatis apice subtruncatis, aparaphysatis 32-sporis, 120 μ . long., parte spor. 70-80 \times 8-10; sporidiis 2-3-stichis, cylindraceis, fumosis, 9-11 \times 1,5-2, utrinque obtusis.

Hab. ad ramos siccos vetustos decorticatos Proustiae pungentis, Batuco Chile Amer. bor.

2. **Cryptovalsa Yuccæ** Speg., An. Mus. Nac. Buenos Aires t. XIX 4572 (1909) p. 332. — Substrato denudato dealbatoque (an causa heterogenea?); stromatibus effusis sublinearibus extus nigris intus albis (10-15 mm. long., 3-6 mm. lat.), planiusculis; peritheciis hinc inde gregariis monostichis, acervulos prominulos irregulariter subhemisphaericos 1-3 mm. diam. efficientibus, parvulis, 150 μ . diam., ostiolo carbonaceo vix exertulo coronatis; ascis antice obtusis postice sensim attenuato-pedicellatis 100-120 \times 12-15; sporidiis cylindraceis utrinque obtusiusculis 7 10 \times 2 eguttulatis, leniter curvulis.

Hab. ad scapos florales exaridos putrescentes Yuccæ gloriosæ in hortis La Plata, Argentina Amer. austr. — *Crypt. Nitschkei* affinis, ascis majoribus matriceque dealbata recedens.

DIATRYPE Fr. — Syll. I p. 191, IX p. 472, XI p. 276, XIV p. 487, XVI p. 426, XVII p. 571.

1. **Diatrype valdiviensis** Speg., Fungi Chilenses (1910) pag. 30, cum 4573 icon. — Stromatibus parvis erumpenti-superficialibus squarrulosis sordide fuscescentibus, intus albescentibus; peritheciis 4-20 constipatis, globosis, parvis, stromate immersis, fulvo-fuscescentibus; ascis clavulatis longiuscule pedicellatis, aparaphysatis, parte spor. 30-40 \times 5-6; sporidiis cylindraceis utrinque obtusis 8-9 \times 2, subguttulatis subchlorinis.

Hab. in ramis emortuis Perseæ Lingue prope Ciudad de Valdivia Chile Amer. austr.

2. **Diatrype annulata** Theiss., Beih. Bot. Centralbl. XXV Bd. (1910) 4574 Abt. II, p. 401. — Stromatibus gregariis, discretis, erumpentibus, corticis laciniis cinctis, semigloboso-pulvinatis, 0,7-1,2 mm. diam., opacis, nigris, asperulis, intus albis; peritheciis globosis, e latere plerumque compressis, 2-5 in quoque stromate, parietibus tenuibus, 250-400 μ . diam., papilla minuta, hemisphaerica nigro-opaca, annulo fusco applanato cinctis; ascis cylindraceis, modice pedicellatis, supra rotundatis, p. sp. 23-32 \times 5-6; sporidiis vermicularibus hyalino-flavidulis, distichis, 7-9 \times 2-2,5.

Hab. ad ramos siccos Compositæ cujusdam, Sao Leopoldo

Rio Grande do Sul Brasiliæ. — *Diatrype asterostomati* B. et C. affinis.

3. *Diatrype Baccharidis* Earle, Bull. of the New York Bot. Gard. 4575 (1904) p. 295. — Stromatibus dense sparsis, quandoque prominentibus, fibris ligneis cinctis, demum nudis, nigris, rugosis, stromate parco, intus obscure flavido-brunneis, 1 mm. circ. cr., sæpe subconfluentibus; peritheciis 3 v. 4 ad 6-8 in quoque stromate, latis, 300-500 μ ., subangulosis, intus nigris, ostioliis superficiem rugulosam reddentibus, compressis v. obscure bisulcatis (subhysterioideis), collo brevi; ascis clavatis, circ. 70 \approx 7; sporidiis curvis, cylindricis, flavidis, 12-14 \approx 2-3.

Hab. in caulibus emortuis *Baccharidis* sp., Stanford Univ. California Amer. bor. (C. F. BAKER).

4. *Diatrype leucoxantha* Rehm in Rehm et Rick in Broteria V (1906) 4576 p. 226. — Stromatibus gregariis demum liberis in ligno denudato atroinquinato sessilibus, irregulariter orbicularibus, 1-1,5 mm altis, 2-4 mm. latis, basi subcontractis, glabris, vertice applanatis, undulato-verruculosis, nigro-fuscis, carbonaceis, intus sub cortice strato albo præditis, sub peritheciis flavo; peritheciis 10-12 arcte congregatis, monostichis, globosis, 0,7-0,8 mm. diam. papillis minutissimis in vertice stromatis conspicuis; ascis tenerrimis, longissime stipitatis, parte sporifera fusiformi, 20-30 \approx 5; sporidiis allantoides, dilute flavidulis 1-cellularibus, 7,5 \approx 2, octonis, distichis; paraphysibus?

Hab. in ligno arboris frondosæ in Brasilia. — *Diatr. chlorosarcæ* affinis.

5. *Diatrype mindanaensis* P. Henn., Hedwigia XLVII (1908) p. 258. 4577 — Stromatibus innato-erumpentibus dein superficialibus gregariis, pulvinatis v. orbiculare disciformibus, atro-carbonaceis, rugulosis, 1-1,5 mm. diam., loculis immersis numerosis, globulosis; ascis stipitatis clavatis, 8-sporis; sporidiis subdistichis, cylindræis, curvulis, fuscidulis, 6-7 \approx 2.

Hab. in ramulis siccis arboris, Mindanao, San Ramon, Zamboanga Ins. Philippin., majo 1904 (COPELAND).

6. *Diatrype utahensis* Rehm, Ann. Mycol. V (1907) p. 516. — Stro- 4578 matibus dispersis, sub cortice nidulantibus, prorumpentibus, laciniiis corticis arcte adhærentibus cinctis, subconoideis, apice truncatis, a matricis substantia heterogeneis, extus atris, intus fuscidulis, 1-1,5 mm. diam.; peritheciis monostichis, globulosis, ca. 300 μ . diam., haud numerosis, ostioliis vix in disco stromatis conspi-

cuis; ascis fusiformibus, stipitatis, $55-60 \times 9$, octosporis; sporidiis oblongis vel subcurvatulis, hyalinis, 1-cellularibus, $12-14 \times 4$, distichis; paraphysibus . . .

Hab. in ramulo? Rock Canyon, Proro, Utah 2700 m. alt. U. St. Am. (Miss FLETCHER, comm. ATKINSON). — Subaffinis *D. verrucoidi*, sed sporidia non vere allantoidea, minora et ostiola non stellato-sulcata.

7. *Diatrype Fletcheri* Rehm, Ann. Mycol. V (1907) p. 516. — Stro- 4579

matibus gregariis, seriatim aggregatis, sub cortice nidulantibus, prorumpentibus, laciniis vix adhærentibus cinctis, a matricis substantia heterogeneis, orbicularibus, convexulis, extus nigris, 2-4 mm. diam., intus fuscidulis; peritheciis permultis, monostichis, stromate immersis, globulosis, ca. 300 μ . latis, collo brevi instructis, papillis parvulis conoideis plus minusve prominentibus, contextu parenchymatico violaceo-brunneo; ascis fusiformibus, tenerimis, longe stipitatis, p. sporif. $40-45 \times 10$, tetrasporis; sporidiis oblongis, rectis, vix aliquantulum curvatulis, hyalinis, 1-cellularibus, $12-15 \times 5$, monostichis; paraphysibus . . .

Hab. ad ramulos? Rock Canyon, Proro, Utah, U. St. Am. c. 2700 m. alt. (Miss FLETCHER, comm. ATKINSON). — Subaffinis forte *Diatr. Macluræ*.

8. *Diatrype infuscans* Ell. et Ev. North Amer. Pyren. (1892) p. 571. 4580

— Stromatibus gregariis, 1-1,5 mm. diam., conico-hemisphaericis v. tuberculiformibus, epidermide nigricante tectis, apice prominentibus; peritheciis 3-6 in quoque stromate, globosis, 250-350 μ . diam., parietibus tenuibus donatis, apice collo brevi contractis et ostiolo lato tuberculiformi præditis; ascis basi anguste stipitatis, parte sp. 25×4 , octosporis, paraphysibus filiformibus obvallatis; sporidiis distichis, allantoideis, leniter curvulis, pallide flavidis, $5-6 \times 1,2-1,5$.

Hab. in ramis emortuis *Smilacis* sp., Houston Texas Amer. bor. (RAVENEL). — A *Diatr. smilacicola* (Schw.) sporidiis et stromate diversa.

9. ? *Diatrype petiginosa* Fr. in litt. ad Mougeot, Currey in Trans. 4581

Linn. Soc. XXII (1858) p. 271, n. 87, t. 46, f. 86. — Stromatibus verrucosis; peritheciis generis (non descriptis). ascis fusoido-clavatis, deorsum sensim tenuato-stipitatis, octosporis; sporidiis subdistichis, allantoideis, utrinque subrotundatis, leviter curvis, $10-15 \times 2-2,5$, flavidis.

Hab. ad cortices in ? *Vogesis*.

Syll. fung. XXII (VIII-1912)

DIATRYPELLA Ces. et De Not. — Syll. I p. 200, IX p. 477, XI p. 277, XIV p. 488, XVI p. 427, XVII p. 572.

1. *Diatrypella Missionum* Speg., Annal. Mus. Nac. Buenos Aires t. XVII 4582 (1908) p. 119. — Stromatibus cortice innatis erumpenti-prominulis verruculosus nigris, irregulariter ellipsoideis, 4-5 mm. long., 2-8 mm. lat., 1,5 mm. alt.; peritheciis monostichis immersis constipatis globosis 350-400 μ . diam., brevissime crasseque ostiolatis; ascis fusosideo-clavulatis antice acutis postice breviter pedicellatis, aparaphysatis, polysporis, 80-100 \times 10-12; sporidiis conglobatis cylindraceis leniter curvulis, utrinque obtusiusculis 4-8 \times 1, chlo-rinulis, minute uniguttulatis.

Hab. ad ramos emortuos adhuc pendulos *Ilicis* paragua-riensis in silvis Campo das Cuías Rep. Argentina Amer. austr. — *D. verruciformi* (Ehrh.) Nits. affinis sed ascis fusosideis apice acutis breviter pedicellatis sporidiisque tenuioribus sat distincta.

2. *Diatrypella Persicæ* Rick, Broteria IV (1905) p. 162. — Stroma- 4583-tibus prorumpentibus, corticem in 3-4 partes dilacerantibus, ceterum cortice ad mediam altitudinem tectis, parum prominentibus, foraminibus inter se junctis materia stromatica, vix conspicuis, nigris; peritheciis pluribus, orbicularibus, parvis, ordine congestis inter lignum et epidermidem nidulantibus, lignum circulis nigris circumscribentibus; ascis longe pedicellatis, multisporis, parte sp. 100-150 \times 10-12; sporidiis 14-17 \times 4, flavovirentibus; paraphysibus dilutis.

Hab. in ramis *Persicæ* vulgaris, Torres Vedras Lusitaniæ.

3. *Diatrypella inflata* Rick, Broteria V (1906) pag. 48. — Stromate 4584-pulvinato, 2 mm. diam., lobis epidermidis arcte cincto, extus intusque atro; peritheciis inter lignum et epidermidem nidulantibus, 1 mm. latis, atris, 3-10 unitis, ostioliis obtusis; ascis longissimis, parte spor. 80-100 \times 15, juvenilibus versus apicem in capitulum sphaericum inflatis, quod in multis semper manet, ceterum ventricosis, polysporis; sporidiis viridi-flavis, conglobatis, 6-8 \times 2, plerumque curvulis.

Hab. in ramis *Nerii Oleandri*, Rio Grande do Sul Brasiliæ. — An eadem ac *Diatr. platensis* Speg.?

4. *Diatrypella Lantanæ* Earle, Bull. of the New York Bot. Gard. 4585 (1904) p. 311. — Stromatibus sparsis, prominentibus, epidermide cinctis, intus extusque nigris, stromate parco, plerumque ellipsoideis, circ. 1 \times 0,75 mm.; peritheciis in quoque stromate 4-10, nigris, globosis, 400-500 μ . diam., ostiolo brevi, levi, umbilicato;

ascis late clavatis, sporidiis fartis, breviter stipitatis, 70-80 \times 10-12; sporidiis numerosissimis, allantoideis, flavis, circ. 7 \times 1,5.

Hab. in ramis emortuis Lantanæ Camaræ, Hog Island Florida (S. M. TRACY).

5. *Diatrypella decorata* Nits. — Syll. I, p. 203. — Var. *major* Berl. 4586
Icon. fung. III, pag. 119, t. 158. — A typo differt stromatibus ascisque majoribus, magis regularibus, non rugosis; ascis 45-50 \times 6-7 p. sporif.; sporidiis 4-5 \times 1, vix viridulis.

Hab. in ramis Fagi in agro Romano. — Affinis quoque *D. verruciformi* sed stromatibus minoribus, non rugosis, ostiolis eximie 4-5-sulcatis, ascis tenuioribus mox dignoscenda.

6. *Diatrypella macrotheca* Starb., Ascom. Schwed. Chaco-Cordill. 4587
Exped., Arkiv f. Bot. Bd. V (1905) p. 26. — Stromatibus basi ligno affixis, vix penetrantibus, per peridermium erumpentibus, gregariis, tubercularibus, ellipsoideis v. fere sphæroideis, $\frac{1}{2}$ -2 mm. diam., sæpe et longitudinaliter et transversim confluentibus, usque ad 5 mm. longis, atratis vel potius obscure rufo-furfuraceis, intus demum pulveraceis, candidis; peritheciis paucis, mono-polystichis, ovoideo-sphæroideis, mutua depressione difformibus, ostiolis latis, primo quadrangulatim limitatis et quadrisulcatis, deinde orbicularibus, umbilicatis, margine lenissime radiatim sulcatulo, c. 200 μ . diam.; ascis polysporis, longissime pedicellatis, parte sporifera clavata, sursum obtuse rotundatis, 130-190 \times 11,5-17, p. spor. c. 75 μ . long.; sporidiis conglobatis, olivaceis, solitariis hyalinis, allantoideis, 5-7 \times 1,5-2; paraphysibus nullis.

Hab. in ramis aridis, Prov. Jujuy, Quinta, pr. Laguna de la Brea, Argentina. — Species ascis longissimis, ostiolis peritheciis distincta videtur.

7. *Diatrypella Fourcroyæ* Vouaux, Bull. Soc. Myc. Fr. (1910) p. 155. 4588
— Stromatibus irregularibus, verrucæformibus, plerumque ellipsoideis, 0,75-1,5 mm. long., 0,5-1 mm. latis, gregariis, disco tantum emergentibus, peridermio innatis insidentibusque ligno, cujus superficiem totam nigrificantibus, nigris; peritheciis paucis, 1-6, sæpius 2- vel 3 in singulo stromate, subglobosis, dense stipatis, ostiolo brevi parumque prominulo, levi v. sulcato instructis; ascis longissime pedicellatis, clavatis, parte spor. 50-60 \times 12-13; stipite 100-120 μ . long.; sporidiis numerosis præditis, pseudoparaphysatis; allantoideis, curvulis, fuscidulis, 5 \times 1.

Hab. in caule Fourcroyæ giganteæ, Magenta prope Nou-méa, Nova-Caledonia (Cacot).

Sect. 2. Hyalosporæ.

CRYPTOSPORELLA Sacc. — Syll. I p. 466, IX p. 609, XIV p. 525, XVI p. 468, XVII p. 592.

1. *Cryptosporella Wagneriana* Rehm, Ann. Mycol. IV (1906) p. 475. 4589
 — Stromatibus valsoideis, cortice plane immutato omnino immer-
 sis, gregariis, seriatis, corticem extus denigratum subelevantibus,
 nulla linea circumscriptis; peritheciis c. 12, globosis, 0,1-0,2 mm.
 diam., laxe orbiculariter positis, collis tenuissimis in disculo rugu-
 loso, suborbiculari, flavidulo, c. 0,25 mm. lat. conjunctis, corticem
 superantibus ibique ostiolis minutissimis nigris conspicuis; ascis
 oblongo-ellipsoideis, 60-70 \approx 15, octosporis; sporidiis oblongis, u-
 trinque rotundatis, rectis v. curvulis, unilocularibus, hyalinis, 18-
 27 \approx 6-7, distichis.

Hab. in ramis emortuis *Aceris Pseudoplatani*, Wint-
 berger Saxonia, Germania. — A *Cr. Niesslii* differt præcipue spo-
 ridiis majoribus oblongis nec fusoides.

2. *Cryptosporella eupatoriicola* Rehm, Ann. Mycol. V (1907) p. 525. 4590
 — Stromatibus ramulum hypertrophicum ambientibus, arcte con-
 gregatis, hemisphæricis, peridermio demum extus nigrescente te-
 ctis, cortice intus linea nigra non circumscripto innatis; peritheciis
 c. 5 globosis, membranaceis, 0,7-1 mm. diam., irregulariter con-
 glomeratis, collis in disculum suborbicularem convergentibus, pa-
 pillulis nigris, hemisphæricis atris, poro vix perspicuo pertusis,
 demum scabriusculis verrucose prominentibus; ascis fusiformibus,
 c. 50 \approx 15, octosporis; sporidiis oblongis, utrinque rotundatis, 12-
 15 \approx 5-6, subhyalinis, strato mucoso obductis, 1-cellularibus; para-
 physibus nullis.

Hab. ad ramulum *Eupatorii bupleurifolii*, Tubarao Bra-
 silia (ULE, comm. PAZSCHKE).

Sect. 3. Phæosporæ.

ANTHOSTOMA Nits. — Syll. I p. 293, IX p. 514, XI p. 283, XIV
 p. 503, XVI p. 441, XVII p. 635.

1. *Anthostoma acerinum* Ell. et Fairm., The Pyren. of Orleans Co. 4591
 untly in Proceed. Rochest. Acad. IV (1905) pag. 189. — Stromate

valsoideo, 1 mm. cr., ligno infosso; peritheciis 4-6, globosis, parvis ($\frac{1}{4}$ mm.), collibus convergentibus, ostiolis minutis papilliformibus disco tuberculiformi erumpentibus; ascis cylindraceis, paraphysatis; sporidiis monostichis, oblongis, brunneis, continuis, 7-10 \times 4-5.

Hab. in trunco acerino, Lyndonville N. Y. Amer. bor.

2. *Anthostoma argentinense* Spegazz., An. Mus. Nac. Buenos Aires 4592 t. XIX (1909) p. 341, — Peritheciis subglobosis majusculis, 1-1,5 mm. diam. plus minusve matrici extus cinerescenti infossis; ascis cylindraceis breviuscule pedicellatis, paraphysatis, octosporis, p. sp. 180-200 \times 15-20; sporidiis eliipsoideo-navicularibus submajusculis opace fuligineis, primum pallidis, 2-guttulatis, 25-32 \times 12-14.

Hab. ad ramos decorticatos *Prosopidum* prope Alto Grande, San Luis Rep. Argentina, Amer. austr. — *Anth. gallico* Sacc. et Flag. affinis.

3. *Anthostoma pulchellum* Schulzer ap. Hazsl. Sphær. Hung. p. 231, 4593 t. XV, f. 58. — Stromatibus e basi plana conoideis, cortice pustulatim elevato tectis, dein erumpentibus; peritheciis 15-20 circinantibus globulosis, stromate immersis, in colla duplo triplove longiora, filiformia, convergentia attenuatis, disco minuto; ascis tereti-clavatis, apice rotundatis breviter tenuato-stipitatis, octosporis; sporidiis oblique monostichis, ellipsoideis v. ovoideis, minutis 5-8 \times 2-3, brunneis, 1-2-guttulatis.

Hab. in ramis *Pruni Cerasi*, Vinkovce Hungariæ (SCHULZER).

4. *Anthostoma tripunctatum* (Bon.) Sacc. et Trav. — Syll. XIX, 4594 p. 75 — *Ascospora tripunctata* Bonord. Handb. Myk. p. 63, t. III, f. 71. — Peritheciis ligno omnino immersis et illud nigrificantibus, globosis, ostiolo non exerto erumpentibus; ascis anguste clavatis, deorsum tenuato-stipitatis, apice rotundatis, stipite crassiusculo; paraphysibus filiformibus; sporidiis oblique monostichis, tereti-ellipsoideis utrinque obtuse rotundatis, rectis, triguttatis, impellucidis, demum cirrose expulsis.

Hab. in ligno putrescente in Germania. — Diagnosis ex icone deprompta.

5. *Anthostoma Coccoes* v. Höhnelt, Fragm. z. Mykol. Sitzb. k. Ak. d. 4595 Wiss. Wien Bd. CXVI, Abt. I (1907) pag. 124. — Stromatibus immersis, tenuibus, effusis, nigris, elongatis, nitidis, magnitudine variabilibus, sæpe confluentibus, superficie levi; peritheciis depressis laxiusculis sæpe lineariter dispositis, 300 μ . circ. diam., ostiolis non prominentibus; contextu perithecii crasso, carbonaceo; paraphysibus numerosis, filiformibus, guttulado-farctis, mucosis; ascis

cylindraceutis, octosporis, $80-90 \times 3,5-4$; sporidiis monostichis, violaceo-brunneis, unilocularibus, elongato-ellipsoideis, sæpe lateraliter depressis, utrinque angustatis, obtusulis v. acutatis, $7-10 \times 2,5-3$.

Hab. in petiolis siccis foliorum *Cocoës* nuciferæ, Malife Samoa (RECHINGER). — *A. versicoloris* Starb. affine.

6. *Anthostoma chusqueicola* Speg., *Fungi Chilenses* (1910) pag. 44, 4596 cum icon. — Maculis nullis; peritheciis laxè gregariis globosis ligno immersis, membranaceis $250-350 \mu$. diam.; ascis cylindraceutis breviter pedicellatis paraphysibus filiformibus commixtis, $250-300 \times 10-12$; sporidiis navicularibus mediocribus, fuligineis, primo tunica mucosa hyalina tenui sæpe parum perspicua vestitis dein nudis. $26-30 \times 9-10$.

Hab. in culmis putrescentibus *Cusqueæ* Cumingii, Cerro Alegre de Valparaiso, Chile Amer. austr.

LOPADOSTOMA (Nke., 1867) Traverso, Fl. ital. crypt. II, fasc. I (1906) p. 169, *Fuckelia* (Nits. in Fuck 1869) (Etym. *lopa* velum et *stoma* ostiolum). — A gen. *Anthostoma* differt peritheciis in stromata discretis, suborbicularia initio peridermio velata (valsea nec eutypea) conjunctis; cetera eadem. — Huc ducendæ sunt species: *Lopadostoma gastrinum* (Fr.) Trav. l. c. (*Anthostoma gastrinum* (Fr.) Sacc. — Syll. I, p. 303). — *Lop. Massaræ* (De Not.) Trav. l. c. (*Anthostoma Massaræ* (De Not.) Sacc. — Syll. I, p. 306). — *Lop. turgidum* (Pers.) Trav. l. c. (*Anthostoma turgidum* (Pers.) Nke — Syll. I, p. 303). — *Lop. tæniosporum* (Sacc.) Trav. l. c. (*Anthostoma tæniosporum* Sacc. — Syll. I, p. 304).

1. *Lopadostoma juglandinum* (Rehm) Sacc. et Trott. — *Anthostoma* 4597 (*Lopadostoma*) *juglandinum* Rehm, Ann. Mycol. VII (1909) p. 531. — Stromatibus cortice extus denigrato intus albo, linea nigra circumscripto arcte gregarie innatis, in rimis cortici lineariter usque 2 cm. longe et 2 mm. late expansis, præterea ellipticis v. lenticulariter orbicularibus, 1-2 mm. diam., atris, peridermio adhærente cinctis, papillulis semiglobosis poro pertusis coronatis; peritheciis globosis 5-12 arcte congregatis, 0,5 mm. diam. monostichis; ascis cylindraceutis c. $130 \times 6-7$, parte sporif. 70×5 , octosporis; sporidiis oblongis, utrinque rotundatis, rectis v. subcurvatis, unicellularibus, utrinque 1(-3)-guttatis, fuscidulis, $8-10 \times 3-3,5$, monostichis; paraphysibus filiformibus.

Hab. ad corticem Juglandis, Port Byrera Illinois Amer. bor. (E. T. et S. A. HARPER). — *Anth. turgido* proximum. —

var. *Caryæ* Rehm, l. c. p. 532. — Stromatibus parallele confluentibus, emergentibus, a peridermio marginatis, utrinque obtusis, nigris, pulverulentis, usque ad 4 cm. longis et 3 mm. latis, ostioliis haud perspicuis, usque ad 2 mm. altis; ceterum ut in *A. juglandino*. — Ad corticem *Caryæ* albæ, River Forrest Ill., Amer. bor. (E. T. et S. A. HARPER).

2. *Lopadostoma turgidum* (Pers.) *Anthostoma turgidum* (Pers.) Nits. 4598 — Syll. I, pag. 303 — var. *minus* Sacc., Annal. Mycol. VI (1908). — A typo differt quia omnibus partibus minus ostioliisque brevioribus, paucioribus; ascis 84-90 \approx 6,5-7; sporidiis ellipsoideis, 8-9 \approx 4,5-5, æque 2-guttatis, fuligineis.

Hab. in cortice, ut videtur, *Quercus* vel *Castaneæ* prope Parisios Galliae. (P. HARIOT).

3. *Lopadostoma dubium* (Feltg.) Sacc. et Trott., *Anthostoma dubium* 4599 Feltg. Vorstud. Pilz. Luxemb. I (1899) p. 179, II (1901) p. 111. Peritheciis plerumque valsoideo-aggregatis, rarius subsparsis, nigris, peridermio tumidulo sed immutato tectis, globosis ostioliis conoideis vix emergentibus; ascis cylindricis 75-85 \approx 6-7, filiformi-paraphysatis; sporidiis oblique monostichis, ellipsoideis, leniter inaequilateris, continuis, 12-15 \approx 4-6, brunneis, sæpe 2-guttulatis.

Hab. in ramis corticatis *Coryli* *Avellanæ*, *Bartringen* *Luxemburgiæ*. — Ex auctore ipso potius ad subg. *Lopadostoma* ducenda species.

Sect. 4. Hyalodidymæ.

MELANCONIS Tub. — Syll. I p. 602, IX p. 700, XIV p. 543, XVI p. 492, XVII p. 667.

1. *Melanconis perniciosa* Briosi et Farneti, Atti R. Ist. bot. Pavia 4600 ser. II, v. XIII (1909) et v. XIV pag. 50, Riv. Patol. Veget. III (1909) p. 341. — Pseudostromatibus sparsis, majusculis, peridermio pustulato tectis, deinde erumpentibus; peritheciis aggregatis, irregulariter sparsis v. subcircinantibus, majusculis, ovatis, in colla convergentia attenuatis; ascis cylindræis, stipitatis, 150-160 μ . longis; paraphysibus filiformibus, ascos longe superantibus; sporidiis octonis, monostichis, raro distichis, elliptico-oblongis, hyalinis, medio didymis, parum constrictis, utrinque obtusiusculis, 35-38 \approx 15-18.

Hab. in cortice *Castaneæ* parasitica, morbum « *Moria dei*

Castagni» v. «Male dell'inchiestro» provocans in Etruria, Liguria, Pedemontio Italiae. — Status conidicus: *Coryneum perniciosum* Br. et Farn.; st. pyrenidicus: *Fusicoccum perniciosum* Br. et Farn. — Cfr. de hac specie ejusque formis observationes cll. Griffon et Maublanc in Bull. Soc. Myc. France, XXV (1910).

2. *Melanconis Alni* Tul. — Syll. I, pag. 604 — var. *manca* Rehm, 4601
Ann. Mycol. IX (1906) pag. 479. — A typo differt appendiculis sporarum non conspicuis.

Hab. in ramis *Alni glutinosæ*, Winterberg in Erzgebirge (WINTER), *Alni viridis* prope Kühtai, Oetz Tyrolia (REHM).

3. *Melanconis Ribis* (P. Henn. et Plötn.) Sacc. et Trott., *Mel. ribin-* 4602
cola Rehm, Ann. Mycol. IV (1905) p. 479. — Ita vocanda est *Ceriospora Ribis* P. Henn. et Plötn. — Syll. XVI, p. 534.

Hab. in ramis emortuis *Ribis nigri*, Wilmersdorfer Wiesen prope Berolinum Germaniæ (SYDOW).

4. *Melanconis helvetica* Rehm, Ann. Mycol. IV (1906) pag. 479. — 4603
Descriptio nulla.

Hab. in ramis emortuis *Salicis* sp., Gotthard-Pass Helvetiæ (REHM).

CHOROSTATE (Sacc.) Trav., Fl. it. Crypt. II (1906) fasc. I, p. 190.

Chorostate Sacc. (ut subgenus *Diaporthes*) — Syll. I, p. 607, XI p. 702, XVI p. 492.

1. *Chorostate atropuncta* (Peck) Sacc. et Trott., *Diaporthe atropuncta* 4604
Peck, N. Y. St. Mus. Bull. 131 (1909) p. 20. — Peritheciis subvalseis, 3-6 in cæspite v. sparsis, minutis, subglobosis, in cortice nidulantibus, nigris, linea nigra nulla limitatis, ostioliis brevibus, glabris, nigris, epidermide leniter elevata rupta circumdatis; ascis oblongis v. subcylindraceis, 100-120 \times 10-12; sporidiis subdistichis, uniseptatis, hyalinis, 25-35 \times 7-8.

Hab. in cortice *Tiliæ americanæ*, Alcove Albany co. Am. bor. (C. L. SHEAR).

2. *Chorostate sorbicola* (Bref.) Sacc. et Trott., *Diaporthe sorbicola* 4605
Brefeld Unters. Mykol. X (1891) pag. 236, t. VIII, f. 10-11. — Stromatibus valseis, conicis, peridermio tumidulo tectis; peritheciis in quoque stromate copiosis, stipatis, ostiolo nigro erumpentibus; ascis oblongis 100-115 \times 12; sporidiis ellipsoideo-oblongis, utrinque rotundatis, bicellularibus, 4-guttatis medio leviter constrictis, distichis, hyalinis, 23-25 \times 6,5-7,5.

Hab. in ramulis Sorbi Aucupariæ in Germania (FUCKEL sub *Valsa sorbicola* partim, in herb. NITSCHE). — Forte eadem species est *D.* (Chor.) *Woroniniae* Jacz. quæ tamen posterior (1896).

3. **Chorostate Sydowiana** Sacc., Annal. Mycol. vol. VI (1908), *Diaporthe* (Chor.) *Sydowiana* Sacc. Herb. — Stromatibus laxè gregariis, subconicis, pustulatim erumpentibus 1 1/2 mm. diam.; peritheciis in quoque stromate paucis (7-10) sæpius circinantibus, globulosis, intus atro-griseis, ostiolis globulosis, parum emergentibus nigris et discum minutum fere totum occupantibus; ascis elongato-fusoides, basi acutatis subsessilibus, apice rotundatis lumineque bifoveolatis, 115-125 × 16-17, aparaphysatis, octosporis; sporidiis distichis tereti-oblongis, utrinque rotundatis, 28-30 × 8,3-9, medio 1-septatis, binucleatis, hyalinis.

Hab. in ramis morientibus Sorbi aucupariæ, Birgsau pr. Oberstdorf Bavariæ, Julio 1906 (P. SYDOW).

4. **Chorostate Ailanti** (Sacc.) Trav., *Diaporthe Ailanthi* Sacc. — Syll. I, p. 621 — var. *megaceraphora* Fairm., Proc. Rochest. Ac. of Sc. IV (1906) p. 220. — Ostiolis emergentibus, valde elongatis.

Hab. in ramis Ailanti, Lyndonville, Amer. bor.

5. **Chorostate Lithrææ** (Speg.) Sacc. et Trott., *Diaporthe Lithrææ* Speg., Fungi Chilenses (1910) p. 62, cum icone p. 200. — Peritheciis cortice innatis, eximie valsoideo-gregariis, globosis parvis membranaceis, ostiolis cylindræis, carbonaceis, conniventibus coronatis, 200-250 µ. diam.; ascis subfusoides aparaphysatis, mox liberis, octosporis, 70-75 × 10-12; sporidiis subcylindræis 1-septato-constrictulis, loculis æquilongis biguttulatis, hyalinis mediocribus, 17-18 × 4-5.

Hab. in ramis emortuis Lithrææ causticæ, Parque de Lota, Chile Amer. austr.

6. **Chorostate salicella** (Fr.) Sacc. — Syll. I, p. 622 (*Diaporthe*) — f. *Populi-tremulæ* Feltg., Vorst. Pilz. Fl. Luxemb. IV (1905) p. 86 (*Gnomonia*). — A typo differt ascis sporidiisque minoribus; ascis 46-55 × 8-10, sporidiis 15-17 × 3,5-4.

Hab. ad apicem ramulorum Populi tremulæ, Heinrichshof Luxemburgia.

7. **Chorostate ostryigena** (Ell. et Dearn.) Sacc. et Trott., *Diaporthe ostryigena* Ell. et Dearn., Fungi Columb. (1905) n. 2019. — Stromatibus cortice interiore v. ligno innatis, subseriatim dispositis, lineæ stromatica nigra profunda endoxyla circumscriptis; peritheciis circinatis v. subcircinatis ligno adnatis v. innatis, globoso-conoi-

deis, basi 0,5-0,5 mm. diam.; ostiolis rimose erumpentibus, minute papillatis, 1,4-5 mm. longis; ascis oblongo-fusoideis, octosporis, 40-48 \times 6-8; sporidiis biseriatis, oblongo-cylindræis, tenuiter nucleatis, 13 \times 3.

Hab. in ramis emortuis *Ostryæ virginianæ*, London, Ontario, Canada (J. DEARNESS).

8. **Chorostate Vogliniana** Sacc. et Trott., *Diaporthe affinis* Voglino, 4611
Annal. R. Accad. Agric. Torino, LIII, 1910 (1911) p. 341, non *Diap.* (*Chorostate*) *affinis* Sacc. — Pseudostromatibus numerosis, non gregariis, ambitu circulari v. elliptico, applanatis, 1-1,5 mm. latis, peridermio diu tectis, dein erumpentibus; peritheciis in quoque acervulo plerumque 6-8 circinantibus, globosis v. ovatis 200-400 μ . latis, ostiolis convergentibus, brevibus, non exertis; ascis cylindræis basi breviter attenuato-subpedicellatis, aparaphysatis, 90-120 \times 10-12, octosporis; sporidiis subdistichis oblongo-fusoideis, constricto-biseptatis, 22-24 \times 5, utrinque obtusis, rectis v. curvulis, 4-guttulatis, hyalinis.

Hab. in ramis corticatis *Populi canadensis*, Santena Italia bor. — Status pycnidicus: sporulis ellipsoideis v. ovoideis, hyalinis 3 \times 1,5 v. 5-6 \times 1,5. — Ob sporidia 2-septata a typo generis deflectit.

9. **Chorostate libera** (v. Höhn.) Sacc. et Trott., *Diaporthe libera* v. 4612 Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I (1909) p. 340. — Stromatibus sparsis, noduloso-depressis, nigris, primum immersis dein cortice disrupta supra liberis; peritheciis irregulariter rotundatis 450-500 μ . cr., collo destitutis sed ostiolo verruciformi præditis, 3-5 in quoque stromate; ascis clavato-fusoideis, sessilibus, tenuiter tunicatis, octosporis, 45-50 \times 6-7, aparaphysatis; sporidiis distichis, fusoideis, apice obtusulis, appendicibus destitutis, quadriocularibus, cuboideo-quadriguttulatis, 9-12 \times 2-3.

Hab. in ramo cujusdam putri Tjibodas in ins. Java.

DIAPORTHE Nits. — Syll. I p. 606, IX p. 702, XI p. 307, XIV p. 543, XVI p. 492, XVII p. 667 (excl. sect. *Chorostate*).

I. *Euporthe*.

1. **Diaporthe Kriegeriana** Rehm, Ann. Mycol. VI (1908) pag. 321. — 4613
Stromate late effuso, ramulos ambiente, peridermio relaxato ostiolis perforato tecto, cortice haud decolorato, ligno intus nigro limitato;

peritheciis primitus tectis, globulosis, ca. 0,2 mm. diam., raro sparsis, plerumque 2-5 arcte congregatis, ligno supremo innatis, in collum elongatis, ostiolis e basi conica cylindraceutis, rectis, ca. 0,5 mm. longe prominentibus; ascis fusoides, 50-55 \times 9, octosporis; sporidiis fusiformibus, medio septatis, vix constrictis, rectis, utraque cellula 1-2-guttata, 12-14 \times 4, hyalinis, distichis; paraphysibus filiformibus.

Hab. ad ramulos siccos *Æsculi Hippocastani* prope Königstein a. Elbe Germania (KRIEGER).

2. *Diaporthe zizyphina* Speg., An. Mus. Nac. Buenos Aires t. XIX 4614 (1907) p. 366. — Peritheciis matrice leniter infuscata infossis, eximie rostellato-ostiolatis, globulosis 200-250 μ . diam., ostiolo 0,5-2 mm. longo; ascis e fusideo clavulatis mox deciduis, paraphysatis octosporis 45-50 \times 9-10; sporidiis distichis ellipsoideo-elongatis 13-15 \times 4-5, medio 1-septatis leniter constrictis, hyalinis, loculis 2-guttulatis infero sæpius leniter minore.

Hab. ad pedunculo fructuum *Zizyphi vulgaris* in hortis San Miguel, Buenos Aires Rep. Argentina Amer. austr.

3. *Diaporthe fasciculata* Nits. — Syll. I, pag. 639 — var. *Meliloti* 4615 Sacc. Fung. ital. fig. 1253. — Peritheciis ligno immersis, peridermio atrato tectis, ostiolis cylindraceutis emergentibus, peritheciis diametrum æquantibus; ascis fusoides, typicis 50-54 \times 8-10, octosporis; sporidiis distichis fusoides utrinque rotundatis vel obtusulis, medio constricto-1-septatis, 12-15 \times 3,5-4, rectis, 4-guttatis, hyalinis.

Hab. in caulibus emortuis *Meliloti officinalis*, Montello, Italia super.

4. *Diaporthe Corallodendri* Speg., An. Mus. Nac. Buenos Aires t. XIX 4616 (1909) p. 362. — Peritheciis ligno denudato v. corticato sordide infuscato immersis, vix ostiolato-papillatis 120-130 μ . diam.; ascis e fusideo subclavatis, mox deciduis, octosporis paraphysatis, 55-60 \times 7-8; sporidiis distichis subfusoides, 14-15 \times 3,5-4, medio uni-septatis non v. leniter constrictis, grosse 4-guttulatis hyalinis, loculis subæqualibus.

Hab. ad ramos aridos *Corallodendri* (*Erythrinæ*) cristæ-galli prope La Plata Rep. Argentina America austr.

5. *Diaporthe Baptisæ* Rehm, Ann. Mycol. VI (1908) pag. 353. — 4617 Pseudostromate late expanso, ramulos ambiente, nigro, cum cortice coalito ejusque superficiem tandem nigrificante, primitus peridermio tecto, dein denudato et ligni superficiem atrificante, intus dilutissime nigro-limitato; peritheciis globosis, sparsis, ligni strato

supremo immersis, ca. 0,15 mm. ostiolis prorumpentibus, cylindraceis, tenuissimis, rectis, ca. 0,5 mm. longis; ascis fusoides, 40-45 \times 6-9, plerumque 4-sporis; sporidiis ellipsoideo-fusiformibus, medio septatis et subconstrictis, utraque cellula biguttata, rectis, hyalinis, 10-12 \times 3,5, distichis; paraphysibus filiformibus, septatis, ca. 3 μ . crassis.

Hab. ad caules Baptisiæ tinctoriæ, Newfield N. Jersey Amer. bor. (ELLIS). — Affinis *Diaporthæ Arcticæ*.

6. *Diaporthe Sphæralcæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 4618 (1909) p. 365. — Peritheciis ligno infuscato v. corticato immersis sparsis v. rostellato-ostiolatis, subglobosis 150 μ . diam.; ascis e clavulato subfusoides, 60 \times 8-10, deciduis, octosporis aparaphysatis; sporidiis distichis ellipsoideis 16 \times 5, medio 1-septatis non v. vix constrictis, hyalinis, loculis minute 2-guttulatis, infero sæpius non-nihil minore.

Hab. ad ramulos aridos Sphæralcæ patagonicæ in horto La Plata Rep. Argentina Amer. austr.

7. *Diaporthe Yerbæ* Speg., Ann. Mus. Nac. Buenos Aires t. XVII 4619 (1908) p. 122. — Peritheciis ramulos adhuc epidermide vestitos, dense minuteque pustulosos reddentibus, ligno immersis 150 μ . diam. sublongiuscule ostiolatis; ascis mox diffluentibus 35-40 \times 8, octosporis, aparaphysatis; sporidiis oblique distichis e cylindraceo ellipsoideis medio uniseptatis, leniter constrictis, utrinque obtusis, grosse 4-guttulatis, hyalinis, 10-11 \times 3-4.

Hab. ad ramos dejectos subputrescentes Ilicis paraguariensis in dumetis Rep. Argentina Amer. austr.

8. *Diaporthe glandulosa* Rehm, Ann. Mycol. VI (1908) p. 321. — 4620 Stromate in ligno decorticato late effuso, idque tenuiter fusco-nigricante, intus nigro-limitato, tenuissimo; peritheciis plus minusve seriatis, globosis, ligno innatis, 0,5 mm. diam., sparsis, solitariis, ostiolo globuloso nigro subprominente; ascis ellipsoideis, tenerrimis, usque ad 45 \times 8-9, octosporis; sporidiis oblongis, utrinque rotundatis, rectis, medio septatis, haud constrictis, utraque cellula 1-2-guttata, 12 \times 3,5, hyalinis, distichis; paraphysibus filiformibus.

Hab. ad ramos putrescentes Ailanti glandulosæ prope Nossen Saxonie (KRIEGER). — A *Diaporthe discutiente* omnino diversa et ob paraphyses anceps.

9. *Diaporthe Gilliesiana* Speg., Fungi Chilenses (1910) p. 63. — Pe- 4621 ritheciis ligno cortice vestito immersis, globosis, parvis, ostiolo cy-

lindræo carbonaceo corticem perforante, sed non exerto, armatis, 150-180 μ . diam.; ascis lanceolatis fluxilibus, octosporis, $50 \approx 8$; sporidiis distichis, cylindræo-subbiconoideis parvis hyalinis, ad septum medium non v. vix constrictis, $14-15 \approx 3,5-4$.

Hab. in ramis emortuis *Lithrææ causticæ* in silvis prope Cerro Caracol de Concepcion, Chile Amer. austr.

10. *Diaporthe Heveæ* Petch, Ann. Roy. Bot. Gard. Peradenya III, 4622 Pt. I (1906) p. 3. — Peritheciis discretis, nigris 0,5-1 mm. diam., circumstantibus, in ligno nidulantibus, in collum circa 1 mm. diam., 0,5 mm. long., parum e cortice emergens, attenuatis; ascis anguste ovatis, octosporis $40-45 \approx 6-8$; sporidiis oblique monostichis, hyalinis, fusoides, uniseptatis, $10-13 \approx 4$.

Hab. in ramis *Heveæ brasiliensis*, Ceylon.

11. *Diaporthe Menispermii* Speg., An. Mus. Nac. Auenos Aires t. XIX 4623 (1909) p. 363. — Peritheciis ligno immersis, ostiolo rostellato corticem perforante non v. vix exerto armatis, globosis 180-200 μ . diam.; ascis subfusoides deciduis octosporis, aparaphysatis, $50-55 \approx 7$; sporidiis elongato-ellipsoideis non v. vix inæquilateralibus, medio 1-septato-constrictulis, $14-15 \approx 4-4,5$, grosse 4-guttulatis hyalinis, loculis subæqualibus.

Hab. vulgata ad ramulos aridos *Menispermii laurifolii* in hortis, La Plata Rep. Argentina Amer. austr.

12. *Diaporthe Elæagni* Rehm — Syll. XIV, p. 546 — var. *americana* 4624 Fairm., Ann. Mycol. VIII (1910) p. 332. — Peritheciis immersis dein ostiolo prominentibus; ascis clavato-cylindræis, utrinque attenuatis, $45-55 \approx 6-7$; sporidiis oblongo-fusoides; uniseptatis, septo constrictis, 4-nucleatis, hyalinis, $13-17 \approx 3-4$.

Hab. in ramis dejectis *Elæagni longipedis* culti, Lyndonville Amer. bor.

13. *Diaporthe Cestri* Speg., An. Mus. Nac. Buenos Aires t. XIX 4625 (1909) p. 361. — Peritheciis matrice corticata v. decorticata lateque infusata infossis, globulosis 90-120 μ . diam., ostiolo minuto rostellato armatis; ascis e fusoides subclavulatis, $55-60 \approx 7-8$, deciduis octosporis aparaphysatis; sporidiis distichis e cylindræo-subfusoides $12-13 \approx 3-4$, medio 1-septatis non v. vix constrictis, grosse 4-guttulatis, loculis æqualibus.

Hab. ad ramos aridos putrescentes *Cestri Parqui* in sepibus prope Villa Casilda Rep. Argentina America austr.

14. *Diaporthe Solani-verbascifolii* Speg., An. Mus. Nac. Buenos Aires 4626 t. XIX (1909) pag. 364. — Peritheciis ligno immersis, plagulas

intus subdealbatus extus nigrefuctos sæpius corticatus incolentibus, subglobosis 100-200 μ . diam., superne prominulis subrostellatis; ascis subfusoides deciduis octosporis aparaphysatis 40-60 \times 8-12; sporidiis ellipsoideis 14-16 \times 3-6, medio 1-septatis, grosse 4-guttulatis hyalinis, loculis æqualibus v. infero vix minore.

Hab. ad ramulos aridos Solani verbascifolii in hortis La Plata, Rep. Argentina Amer. austr.

15. *Diaporthe cornicola* Ell. et Ev. — Syll. XIV, pag. 546 — var. 4627
acuta Starb., Ascom. Schw. Chaco-Cordill. Exp., Arkiv. f. Bot. Bd. V (1905) p. 25. — Peritheciis minoribus, 200 μ . diam., ostioliis cylindræis, acutiusculis peridermium perforantibus, partibus internis minoribus a typo differt; ascis 38-40 \times 6,5-7,5; sporidiis 9-11,5 \times 3-4.

Hab. in ramis siccis Crotonis, Gran Chaco, Tatareda, Bolivia.

16. *Diaporthe Ricini* Spegazz., An. Mus. Nac. Buenos Aires t. XIX 4628
 (1909) p. 364. — Peritheciis ligno extus nigrefacto intus subimmutato, omnino infossis, inermibus, globulosis, 100-150 μ . diam.; ascis subfusoides, cito deciduis subdiffluentibus, octosporis aparaphysatis 50 \times 8-9; sporidiis distichis ellipsoideo-subfusoides, medio 1-septatis leniter constrictulis, 14-15 \times 5, grosse 4-guttulatis, hyalinis, loculis æqualibus.

Hab. ad ramos emortuos subputrescentes Ricini communis in sepibus prope La Plata Rep. Argentina Amer. austr.

17. *Diaporthe asterisciina* Speg., Fungi Chilenses (1910) p. 63, cum 4629
 icone, p. 200. — Peritheciis ligno denudato extus nigrefacto immersis, globulosis, minutis, membranaceis, ostiolo carbonaceo parum exerto armatis, 90-110 μ . diam.; ascis subfusoides mox liberis aparaphysatis, 50 \times 10; sporidiis subcylindræis parvis, hyalinis 1-septato-constrictulis, 12-13 \times 4-4,5.

Hab. in pedunculis siccis Asteriscii (Dipterygiæ) chilensis, Cerro Caracol de Concepcion, Chile Amer. austr.

18. *Diaporthe aberrans* Speg., Fungi Chilenses (1910) p. 62. — Pe- 4630
 ritheciis ligno denudato non vel vix infuscato omnino immersis, globosis minutis membranaceis, ostiolo carbonaceo vix exerto coronatis, 100-120 μ . diam.; ascis subcylindræis breviter crasseque pedicellatis, octosporis, 65-70 \times 10-12; sporidiis distichis subcylindræis subparvis ad medium 1-septato-constrictulis hyalinis, loculis æquilongis, biguttulatis, obtusis, 14-15 \times 4-5.

Hab. in pedunculis emortuis Lobeliæ salicifoliæ, Cerro

Alegre de Valparaiso, Chile, Amer. austr. — Forma ascorum a gen. *Diaporthe* recedit.

19. *Diaporthe microplaca* Sacc., in Ann. Mycol. X (1912) p. 316. — 4631
Stromatibus initio epidermide velatis, maculiformibus, nigris, acute limitatis, oblongis v. sublobatis, minutis, 3-4 mm. longis, lignum penetrantibus lineaque atra sæpe cinctis; peritheciis stromate innatis globulosis, exiguis, 250-300 μ . diam., ostioli punctiformibus, nunquam emergentibus; ascis fusoides, aparaphysatis, apice bivoelatis, 30-35 \times 7, octosporis; sporidiis distichis, fusiformibus, obsolete 1-septatis, rectiusculis, 10-12 \times 3, hyalinis.

Hab. in peridermio lignoque supposito *Lonicerae* semper virentis in Horto Botanico patavino, 1897 (D. SACCARDO). — Species e subgenere *Euporthe*, cum *Diap. cryptica* nil commune habet.

20. *Diaporthe Tupæ* Speg., Fungi Chilenses (1910) p. 64. — Peri- 4632
theeciis ligno denudato infossis, gregariis, clypeo stromatico determinato aterrimo tectis, globulosis, minutis, 90-100 μ . diam., breviter papillato-ostioliatis; ascis fluxilibus subfusoides, aparaphysatis, octosporis, 50-55 \times 10-12; sporidiis biconoides, hyalinis, parvis, constrictis, guttulatis, 12-14 \times 4.

Hab. in pedunculis siccis *Lobeliae* *Tupæ* in silvis prope Ciudad de Valdivia, Chile Amer. austr.

21. *Diaporthe orthoceras* (Fr.) Nits. — Syll. I, p. 651 — var. *decidua* 4633
Starb., Ascom. Schwed. Chaco-Cordill. Exp., Arkiv f. Bot. Bd. V (1905) p. 26. — Stromatibus obsoletis, linea nigra significatis, ellipticis vel oblongatis vel nonnumquam longe et angustissime seriatis, 1-nonnulla perithecia includentibus; peritheciis cortice immersis, basi ligno insculptis, ostiolo cylindrico, interdum longiuscule exserto, sæpissime abrupte deciduo erumpentibus, c. 200 μ . diam., textura membranacea; ascis late fusiformibus v. clavatis, utrinque acutiusculis, 32-38 \times 6-7,5; sporidiis octonis, distichis vel conglobatis vel inferioribus monostichis, fusoides quadriguttulatis, deinde medio septatis, 8-10 \times 2,5-4; paraphysibus nullis.

Hab. in caulibus aridis lianæ *Compositarum* spec. (*liana*), Gran Chaco, Tatarenda Bolivia. — A typo differt matrice non nigricata, peritheciis basi tantum ligno infossis, sporidiis minoribus.

22. *Diaporthe Xanthii* Speg., An. Mus. Nac. Buenos Aires t. XIX 4634
(1909) p. 366. — Matrice late atrata, peritheciis infossis densius-

scule gregariis, minutis vix rostellato-ostiolatis, 160-180 μ . diam. (sic); ascis fusoides mox deciduis aparaphysatis, octosporis, 50-60 \approx 8-9; sporidiis e fusideo subcylindræis utrinque acutiuscule subrotundatis 14-16 \approx 4, rectis v. lenissime subcurvulis, medio 1-septatis non v. vix constrictis, hyalinis, loculis æqualibus subgrosse biguttulatis.

Hab. ad caules aridos putrescentes *Xanthii spinosi* prope La Plata, Argentina Amer. austr.

23. *Diaporthe Tageteos* Speg., An. Mus. Nac. Buenos Aires t. XIX 4635 (1909) p. 365. — Peritheciis hinc inde laxè gregariis, matrice sordide infuscata immersis vix rostellato-ostiolatis, globulosis 90-100 μ . diam.; ascis e fusideo clavulatis 50-55 \approx 7-9 mox deciduis, aparaphysatis, octosporis; sporidiis distichis e subcylindræo fusoides, 14-16 \approx 4, medio 1-septatis leniter constrictis hyalinis, loculis æqualibus grosse biguttulatis.

Hab. ad caules aridos putrescentes *Tageteos* minutæ in pratis circa Villa Casilda, Rep. Argentina Amer. austr.

24. *Diaporthe Centrophylli* Speg., An. Mus. Nac. Buenos Aires t. XIX 4636 (1909) p. 362. — Peritheciis ligno vestito v. denudato semperque infuscato infossis v. ostiolato-papillatis, globulosis, 150-180 μ . diam.; ascis subfusoides deciduis octosporis, aparaphysatis, 50-60 \approx 8-10; sporidiis distichis e cylindræo fusoides rectis v. leniter inæquilateralibus 15-16 \approx 3,5-4, medio 1-septatis non v. vix constrictis, grosse 4-guttulatis hyalinis, loculis æqualibus.

Hab. ad basim caulium *Centrophylli lanati* in arvis circa La Plata Rep. Argentina America austr.

25. *Diaporthe Amaranti* Speg., An. Mus. Nac. Buenos Aires t. XIX 4637 (1909) p. 360. — Matrice hinc inde extus late sordideque infuscata; peritheciis in maculis gregariis, relaxatis v. confertis, matrice infossis, globulosis, 120-150 μ . diam., sursum prominulis atque ostiolo carbonaceo sæpius breviusculo armatis; ascis fusoides 45-50 \approx 8, aparaphysatis, octosporis; sporidiis distichis ellipsoideis medio 1-septato-constrictis, loculis subæqualibus, hyalinis grosse biguttulatis, 10-12 \approx 4.

Hab. ad caules putrescentes *Amaranti chlorostachydis* in arvis Villa Casilda Rep. Argentina Amer. austr.

26. *Diaporthe catamarcensis* Spegazz., An. Mus. Nac. Buenos Aires 4638 t. XIX (1909) pag. 361. — Peritheciis ligno corticato immersis, ostiolo longiusculo exerto ornatis, globosis 120-150 μ . diam.; ascis fusoides, mox deciduis, aparaphysatis, octosporis 40-45 \approx 7-8; spori-

diis distichis ellipsoideo-fusoideis, 12-15 \times 3-4, medio 1-septato-constrictis grosse 4-guttulatis, hyalinis, loculis æqualibus.

Hab. ad ramulos aridos Salicis chilensis var. pyramidalis in Catamarca Rep. Argentina Amer. austr.

27. *Diaporthe Macluræ* Speg., An. Mus. Nac. Buenos Aires t. XIX 4639 (1909) p. 362. — Peritheciis ligno insculptis sed superne cortice obtegente adnatis, minute papillato-ostiolatis, globulosis, 120-150 μ . diam.; ascis e fusoideo subclavulatis, deciduis, octosporis aparaphysatis, 50-60 \times 7-10; sporidiis distichis, ellipsoideis, medio 1-septatis plus minusve constrictis, 12-16 \times 4-6, grosse 4-guttulatis, hyalinis, loculis subæqualibus.

Hab. ad ramos putrescentes Macluræ aurantiacæ in sepibus prov. Buenos Aires, Rep. Argentina Amer. austr.

28. *Diaporthe Casuarinæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 4640 (1909) p. 361. — Peritheciis ligno extus infuscato intus pallescente sparse immersis, globulosis 100-120 μ . diam.; ascis e fusoideo subclavulatis 50-60 \times 10-22 cito deciduis, aparaphysatis octosporis 50-60 \times 10-12; sporidiis ellipsoideis, 12 \times 6, medio 1-septato-constrictis, loculis subæqualibus grosse 1-2-guttulatis hyalinis.

Hab. ad ramulos emortuos aridos Casuarinæ strictæ in horto Claypole, Buenos Aires Rep. Argentina Amer. austr.

29. *Diaporthe chamæropina* L. Gaja, Fl. micol. prov. Padova, p. 19 4641 (sunto lit.). — Stromate linea nigricante limitato; peritheciis solitariis, raro proximatis, immersis, subglobosis, atris, 220-240 μ . latis, collo oblongo cylindraceo obtuso et inæquali erumpentibus, ascis cylindraceis-fusoideis, octosporis, aparaphysatis, 62-66 \times 6-8; sporidiis uniseptatis, hyalinis, medio constrictis, 4-guttulatis, oblique monostichis, sæpe ad apicem acutiusculis, 12-14 \times 5-6.

Hab. in petiolis Chamæropis humilis in Viridario Convictus Universitariorum « Francesco Petrarca » Patavii Ital. bor. — Affinis est *Diaporthe Phœnicis*, a qua differt substrato, collo perithecorum longiore, sporidiis crassioribus, et medio constrictis.

30. *Diaporthe Musæ* Spegazz., An. Mus. Nac. Buenos Aires t. XIX 4642 (1909) p. 363. — Matrice extus plus minusve late vageve infuscata, intus immutata; peritheciis parenchymate petiolorum immersis, minutis globosis, majusculis rostellatis, quandoque inermibus, nigris, 150 μ . diam.; ascis e fusoideo subclavulatis, deciduis octosporis aparaphysatis, 40-58 \times 8-10; sporidiis distichis rectis vel lenissime inæquilateralibus, medio 1-septato-constrictis, 10-13 \times 5-6, grosse 4-guttulatis hyalinis, loculis subæqualibus.

Hab. ad petiolos putrescentes foliorum Musæ sapientum in hortis prope Oran Jujuy Amer. austr.

31. *Diaporthe ? Tillandsiæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 4643 (1909) p. 365. — Peritheciis parenchymate infossis parvis, ostiolis rostellatis carbonaceis armatis, globulosis 200-226 μ . diam.; ascis cylindraceis non deciduis nec diffluentibus, aparaphysatis 180-200 \times 15-16; sporidiis monostichis, rectis, ellipsoideis, 20 \times 12, medio 1-septatis hyalinis, loculis æqualibus subglobosis eguttulatis.

Hab. ad folia arida putrescentia *Tillandsiæ Duratii* in hortis La Plata, Rep. Argentina Amer. austr. — Habitu externo typico sed ascis cylindraceis non caducis sporarumque loculis subglobosis eguttulatis desciscens.

32. *Diaporthe Sacchari* Speg., An. Mus. Nac. Buenos Aires t. XIX 4644 (1909) p. 364. — Matrice immutata v. vix vage pallideque infusata; peritheciis lenticularibus hinc inde laxe gregariis insculptoprominulis brevissime rostellatis, 120-150 μ . diam.; ascis e fusoides subclavulatis, octosporis, aparaphysatis, 65-90 \times 14-18; sporidiis subfusoides distichis sæpius leniter subcurvulis, 20-30 \times 5-7, medio 1-septatis non v. vix constrictis, loculis subæqualibus grosse 1-guttulatis hyalinis.

Hab. ad culmos putrescentes *Sacchari* officinarum in campis prope Ledesma, Jujuy Rep. Argentina, Amer. austr.

II. *Tetrastaga*.

33. *Diaporthe Anonæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 4645 (1909) p. 360. — Matrice immutata; peritheciis cortice dealbato omnino immersis e globoso depressis, membranaceis, olivaceis, 120-160, ostiolo vix papillato exertoque coronatis; ascis fusoides mox deciduis, aparaphysatis, octosporis, 45-50 \times 8; sporidiis distichis e cylindraceo subfusoides, 12-13 \times 3, medio 1-septatis, non vel vix constrictis, grosse 4-guttulatis, loculis æqualibus.

Hab. ad ramulos aridos *Anonæ Cherimoliæ* in hortis Tucuman Rep. Argentina Amer. austr.

34. *Diaporthe valparadisiensis* Speg., Fungi Chilenses (1910) p. 64. — 4646 Peritheciis hinc inde parce gregariis v. sparsis, cortice subimmutata immersis, subglobosis, minutis, vix papillato-ostiolatis 180-200 μ . diam.; ascis non fluxilibus e fusoides-subclavulatis, breviter pedicellatis, aparaphysatis, 70 \times 8, octosporis; sporidiis subcylindra-

ceis v. leniter subbiconoideis utrinque obtusis, medio 1-septato-constrictis hyalinis, 14-15 \approx 4, grosse guttulatis.

Hab. in ramis siccis *Lithrææ causticæ*, Cerro Alegre de Valparaíso, Chile Amer. austr. — Ob structuram ascorum a genere parum recedit.

35. *Diaporthe Mate* Speg., Ann. Mus. Nac. Buenos Aires t. XVII 4647 (1908) pag. 122. — Peritheciis cortice innatis epidermide velatis 150-200 μ . diam., sparsis v. laxe gregariis, albo-farctis, ostiolo minute carbonaceo coronatis; ascis fusoides-clavulatis, paraphysatis, octosporis, 75-80 \approx 15-20; sporidiis oblique distichis subbiconoideis, medio uni-septato-constrictis, 20-22 \approx 7, loculis sæpius grosse 1-v. 2-guttulatis, hyalinis.

Hab. ad ramos aridos adhuc pendulos *Ilicis paraguayensis*, in silvis circa Campo das Cuías Rep. Argentinae Amer. austr. *D. binoculata* (Ell.) Sacc. affinis, sporidiis duplo angustioribus distincta.

36. *Diaporthe Abutilonis* Speg., An. Mus. Nac. Buenos Aires t. XIX 4648 (1909) p. 366. — Peritheciis cortice infuscato infossis, densiuscule gregariis, globosis 100-120 μ . diam. ostiolo non v. vix papillato, matricis superficiem attingente, coronatis; ascis e fusoides subclavulatis citissime deciduis, 45-50 \approx 7-8, octosporis, paraphysatis; sporidiis distichis e cylindræo subfusoides, 12-14 \approx 3-4, medio 1-septatis non v. lenissime constrictis hyalinis, loculis subæqualibus biguttulatis.

Hab. ad ramos aridos putrescentes *Abutilonis sordidi* in silva Santa Catalina prope Buenos Aires Rep. Argentina Amer. austr.

37. *Diaporthe Nerii* Spegazz., An. Mus. Nac. Buenos Aires t. XIX 4649 (1909) p. 366. — Peritheciis matrice late nigrefacta infossis, globosis, 140-150 μ . diam., membranaceis vix papillulato-ostiolatis; ascis e fusoides subclavulatis, 50-55 \approx 8-10, cito secedentibus, octosporis, paraphysatis; sporidiis subelongato-ellipsoideis 14-15 \approx 4-5, medio 1-septato-constrictis, hyalinis, loculis æqualibus biguttulatis.

Hab. ad ramulos emortuos putrescentes *Nerii Oleandri* in hortis La Plata Rep. Argentina Amer. austr.

38. *Diaporthe Polygoni* Rehm, Ann. Mycol. VI (1908) pag. 321. — 4650 Stromate late effuso, caulem ambiente, demum extus nigricante, intus linea nigra vix conspicua limitato; peritheciis dispersis, seriatis in cortice immutato nidulantibus eumque protrudentibus, globosis, 0,15 mm. diam., demum collabescentibus, ostiolo tenuis-

simo cylindræo recto peridermium perforantibus et usque ad 0,5 mm. prominentibus; ascis ellipticis, $35-45 \times 9-10$, octosporis; sporidiis oblongis, obtusis, rectis, bicellularibus, medio constrictis, utraque cellula guttis 2 magnis oleosis repleta, demum 3-septatis, hyalinis, $7-10 \times 2,5-3$ distichis; paraphysibus nullis.

Hab. ad caules siccos Polygoni avicularis, Lichterfelde pr. Berolinum Germaniæ (Sydow).

39. *Diaporthæ immaculata* Rehm, in Jaap, Abh. bot. Ver. Prov. Bran- 4651
denb. LII (1910) p. 148. — Nomen nudum.

Hab. in caulibus vetustis Rumicis crispis prope Triglitz, Germania.

40. *Diaporthæ prenanthicola* Atkins. in Rehm, Ann. Myc. VII (1909) 4652
p. 531. — Nomen nudum.

Hab. in ramis emortuis Prenanthidis, Altissima Cascatilla Ithaca Amer. bor. (G. F. ATKINSON).

PSEUDODIAPORTHE Spegazz., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 358 (Etym. *pseudes* falsus et *Diaporthæ*). — Perithecia matrice immersa, stromate genuino destituta. Asci pedicellati non decidui, paraphysati; sporidia didyma hyalina. — Genus ascis strato prolifero adnatis et paraphysatis a *Diaporthæ* optime distinctum.

1. *Pseudodiaporthæ Coffeæ* Speg., l. c. p. 358 cum icon. — Perithe- 4653
ciis corticulis v. ligniculis, globulosis, 200-300 μ . diam., rostellato-ostiolatis, laxissime pauci-gregariis; ascis e fusoidæo clavulatis breviter pedicellatis, $110-150 \times 18-20$, paraphysibus filiformibus longioribus densiusculis obvallatis; sporidiis biconoideis di- v. tristichis, medio 1-septatis, leniter constrictis, oculis æqualibus grosse biguttulatis.

Hab. ad ramos emortuos Coffeæ arabicæ in hortis Orán, Jujuy Rep. Argentina, Amer. austr.

2. *Pseudodiaporthæ major* Speg., An. Mus. Nac. Buenos Aires t. XIX 4654
(1909) p. 359. — Peritheciis 500-800 μ . diam.; ascis e cylindræo-subclavulatis, sæpius torulosis, $120-140 \times 20-24$; sporidiis ellipsoideo-didymis, $30-34 \times 12-14$.

Hab. ad ramulos emortuos Coffeæ libericæ in hortis Orán, Jujuy, Rep. Argentina Amer. austr. — Species a precedente notis nonnullis vix recedens et facile ejusdem varietatem majorem sistens sed formæ intermediæ adhuc non inventæ.

STIGMATOPSIS Trav., Fl. ital. cryptog. II, fasc. I (1906) pag. 213 (Etym. a *stigma* et *opsis* facies, quia *Diatrypem Stigma* habitu omnino imitatur). — Stroma genuinum, effusum, erumpenti-superficiale, ligneo-carbonaceum, fragile, extus intusque nigricans. Perithecia monosticha, stromate immersa, globoso-ovoidea v. angulata, atra; asci clavato-oblongi, pedicellati, paraphysati, octospori; sporidia ellipsoideo-oblonga, 1-septata, hyalina v. dilute fuscidula, guttulata. — Est *Diatrype* sporidiis hyalo-didymis.

1. **Stigmatopsis Baccarinii** Trav., l. c. p. 214, fig. 39. — Stromate 4655 effuso, longe expanso, subcarbonaceo, nigricante, ostiolis prominulis punctulato; peritheciis immersis monostichis, stipatis, globoso-ovoideis, $\frac{1}{3}$ - $\frac{1}{2}$ mm. diam., mutua pressione saepe angulatis, in collum brevissimum productis, nigris; ostiolis prominulis poro circulari v. eroso pertusis; ascis clavato-fusoideis, longiuscule pedicellatis, 75-100 \times 8-11 (p. sp. 55-70 μ . longa) paraphysibus filiformibus paucis obvallatis; sporidiis irregulariter distichis, initio suballantoideis, dein ellipsoideo-oblongis, rectis v. curvulis, 1-septatis, ad septum parum constrictis, quadriguttulatis, in asco luteo-fuscidulis, extus subhyalinis, 15-20 \times 5-6.

Hab. in ramis corticatis Fagi, Vallombrosa Etruriæ, Italia centr. (BACCARINI).

MYRMÆCIUM (Nits.) Sacc. — Syll. I p. 600, XIV p. 492, XVII p. 675.

1. **Myrmæcium Höhnelianum** (Rick) Sacc. et Trav. — Syll. XX p. 1275 4656 *Myrmæciella Höhneliana* Rick in Theissen Annal. Mycol. (1910) p. 456 c. fig. — Subepidermicum, erumpens; stromate flavo-rubello, ætate atro-sanguineo, suberoso, e cellulis polygonalibus membranaceis crassis formato; peritheciis stipatis, ellipsoideis vel subglobosis, raro solitariis, plerumque in pulvinulos globosos c. 1,2-1,5 \times 0,8-1 mm. aggregatis, partim stromate communi immersis, partim subluberis, vertice nudo vitreo-sanguineo, c. 420-500 \times 240-340, poro minuto, orbiculari, interdum e latere compresso lophiostomateo pertusis; ascis sessilibus vel brevissime nodulose stipitatis, elongatis, 118-135 \times 20-25 v. brevioribus subventricosis, 95 \times 28-30, octosporis; sporidiis distichis, hyalinis, oblongis, leniter convexo-concavis, medio septatis, raro subconstrictis, irregulariter guttulatatis, 35-44 \times 11-13; paraphysibus nullis.

Hab. in ramis Rubi sp. in Brasilia. — Species quoad sedem systematicam dubia.

2. *Myrmæcium Harperianum* Rehm, Ann. Mycol. VII (1909) p. 532. 4657

— Stromatibus in ramulo gregariis, lenticularibus, convexulis, innatis, singularibus, interdum binis confluentibus, extus cinereo-nigris v. atris, 3-4 mm. diam., lignum dealbatum linea tenui nigra, usque ad 5 mm. profunde et 1,5 cm. late ambientibus; peritheciis globosis 3-6 ligno monostiche innatis, 0,5 0,8 mm. diam., membranaceis, fusco-contextis, collis convergentibus, in superficie stromatis denigrati sæpe peridermii squamulis obtectis, papillis conicis obtusis prominentibus; ascis cylindraceis 120-136 × 10-12, octosporis; sporidiis oblongis, utrinque rotundatis, medio septatis et valde constrictis, hyalinis, 15-18 × 7-8, strato mucoso 2 μ . lato obductis, monostichis; paraphysibus filiformibus, septatis, 3 μ . cr., hyalinis.

Hab. ad ramum Corni, Summer Wash. Amer. bor. (ex Herb. E. T. et S. A. HARPER). — *M. endoleuco* affine sed distinctum.

ENDOTHIA Fr. — Syll. I p. 601, IX p. 700, XIV p. 550, XVII p. 675.

1. *Endothia gyrosa* (Schw.) Fr. — Syll. I, pag. 601 — Hue juxta 4658 exempl. originalia et observante quoque cl. von Höhnelt (Fragm. zur Mykol. IX (1909) p. 20) spectat *Diaporthe parasitica* Murr. (Torreya VI, pag. 189) seu *Valsonectria parasitica* Rehm (Ann. Mycol. (1907) p. 210), valde noxia Castaneis et vere parasitica in Amer. boreali et cujus st. pycnid. (frequentior) est *Endothiella gyrosa* Sacc. Cfr. Syll. XXII. De his fungillis cfr. observationes biologicas cl. Henr. Pantanelli (Rendic. R. Accad. Linc. 1911), qui tamen infauste habuit ut *Diaporthe parasitica*!

*Sect. 5. Phæodidymæ.***VALSARIA** De Not. et Ces. — Syll. I p. 741, IX p. 755, XI p. 318, XIV p. 560, XVI p. 509, XVII p. 691.

1. *Valsaria Milletiæ* (Racib.) Sacc. et Trott., *Myrmæcium Milletiæ* 4659 Raciborski, Bull. Ac. Sc. Cracovie (1909) pag. 391. — Maculis foliiculis rotundatis primum viridi-flavis dein flavis, 0,5-1 cm. latis; stromate immerso 50 μ . circ. cr. et 1-5 mm. lato; peritheciis in quoque stromate numerosis et epidermidem matricis verruciformi-elevantibus demum ostiolo papilliformi depresso brunneo-flavo ex ea erumpentibus; peritheciis subglobosis v. sublenticularibus, 100-

190 μ . altis, 200-260 μ . latis, papillis ostiolaribus stroma radiatim findentibus; ascis aparaphysatis, allantoides, 38-44 \times 9-12, octosporis; sporidiis distichis, bilocularibus, levibus, ovoideis 7-9 \times 3-4, utrinque rotundatis non constrictis, nigro-brunneis.

Hab. in foliis *Milletiæ sericeæ*, Diasinga prope Buntenzorg in ins. Java.

2. **Valsaria acericola** Fairm., The Pyren. of Orleans County in Proc. 4660
Rochest. Acad. IV (1905) p. 189. — Stromate corticali, valsoideo, 2 mm. circ. diam.; peritheciis circinatis, parvis, 0,5 mm., cortice interiore infossis et linea nulla stromatica circumscriptis, ostioliis convergentibus et apice in discum nigrum minutum prominulum unitis et pustulas subconicas erumpentes epidermide cinctas efficientibus; ascis cylindraceis, p. sp. 250 \times 15-18; paraphysibus?; sporidiis uniseriatis, oblongo-ellipsoideis, brunneis, uniseptatis, septo constrictis, apice rotundatis, 33-40 \times 15-18.

Hab. ad truncos *Aceris rubri*, Ridgeway, New York, Amer. bor. (FAIRMAN).

3. **Valsaria clavatiasca** Speg., Ann. Mus. Nac. Buenos Aires t. XVII 4661
(1908) p. 123, cum icon. — Peritheciis sæpius laxè gregariis cortice innatis, epidermide arcte adnata vestitis, lenticularibus 400-750 μ . diam., carbonaceis, ostiolo vix papillulato ornatis; ascis constipatis clavulato-cylindraceis aparaphysatis, cuneato-pedicellatis long. tot. 150 μ ., p. sp. 120 \times 28; sporidiis ellipsoideo-subbiconoides, medio 1-septatis, non v. vix constrictis, primo tunica tenuissima mucosa hyalina vestitis dein nudis, levibus, fuligineis, 30-35 \times 14-15.

Hab. vulgata ad ramos emortuos corticatos *Ilicis paraguayensis* Rep. Argentina Amer. austr. — Potius *Phaeospermatis* sp.

4. **Valsaria Mata** Roll. Bull. Soc. Mycol. (1905) p. 24, t. I, f. 1. — 4662
Stromate valseo, nigro, corticali; peritheciis in quoque acervulo 8-10, globosis, stipatis, 0,3-0,5 mm. diam, collis in discum cruciatim impressum cuticula cinctum convergentibus; ascis cylindraceis, breviter stipitatis, 150 \times 10 filiformi-paraphysatis, octosporis; sporidiis monostichis oblongatis, utrinque rotundatis, 1-septatis, medio constrictis, guttulatis, chlorinis dein pallide brunneis, demum atris, 20-24 \times 8-10.

Hab. in ligno *Pistaciæ Lentisci* (vulgo *Mata*) pr. Palma in insul. Balearibus. — Affinis *Vals. insitivæ*.

5. **Valsaria Spartii** Maubl. Bull. Soc. Mycol. (1905) pag. 88, tab. VI, 4663
f. 11. — *Euvalsaria*; stromatibus nigris, carbonaceis, erumpenti-

bus, verrucosis, 1-4 mm. latis; peritheciis inordinate immersis v. irregulariter circinantibus, difformibus, globulosisve; ascis cylindricis, breviter stipitatis, 150-170 \times 10-12, octosporis, paraphysibus filiformibus guttulatis, 2 μ . cr. obvallatis; sporidiis monostichis, primum lutescentibus guttatisque deiu fuliginis, 1-septatis, constrictis, sæpe inæquilateris, nunc utrinque rotundatis, nunc basi tenuatis, 18-22 \times 8-10.

Hab. in ramis *Spartii juncei*, Pornic Loire inf. Gallia. — In stromate juniore occurrunt interdum pycnidia sporulis ovoideis, hyalinis 2,5 \times 2, sporophoris acicularibus 20 μ . longis suffultis.

6. *Valsaria insitiva* Ces. et De Not. — Syll. I, p. 741. — f. *Acaciæ caveniæ* Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 373. — Ascis cylindræis 70-80 \times 10; aparaphysatis; sporidiis ellipsoideo-biconoideis 14-15 \times 8 non v. vix constrictis. — f. *Cordiæ Gerascanthi* Speg., l. c. — Ascis cylindræis 90-100 \times 10, dense paraphysatis; sporidiis ex elliptico subovoideis 14-16 \times 7-8, loculis subæqualibus v. infero sæpius vix minore. — f. *Mimosæ polycarpæ* Speg., l. c. — Ascis cylindræis breviuscule pedicellatis, 120 \times 10 modice paraphysatis; sporidiis ellipsoideis utrinque obtusissimis 14-15 \times 7-10 non v. vix subcoarctatis.

Hab. vulgata ad ramos aridos putrescentesque matricum indicatarum, Argentina America austr.

7. *Valsaria Theissenii* Rehm, Ann. Mycol. VII (1909) pag. 537. — 4665
Stromatibus irregulariter orbicularibus, 0,5-1,5 cm. diam., 1 mm. cr., atris, cortici innatis, convexulis, ligno linea tenui nigra subtus percurso, glabris; peritheciis globulosis, haud papillulatis, poro pertusis, arcte congregatis, stromate innatis, 0,15 mm., diam., carbonaceis; ascis cylindræis, apice rotundatis, octosporis 70 \times 6; sporidiis ellipsoideis, utrinque subobtusis, medio septatis et aliquantulum constrictis, utraque cellula 1-guttata, fuscis, 9-10 \times 4, monostichis; paraphysibus filiformibus, 1 μ . cr.

Hab. in ramo emortuo, Sao Leopoldo Rio Grando do Sul Brasiliæ (THEISSEN S. J.).

8. *Valsaria chilensis* Speg., Fungi Chilenses (1910) p. 68, cum icon. 4666
— Euvalsaria; stromatibus parum prominulis, ligno impositis, epidermide velatis, nigris, scrupulosis, confluyendo difformibus; peritheciis stromate constipatis, subglobosis, subcarbonaceis, vix papillato-ostiolatis, 150-200 μ . diam.; ascis cylindræis non v. vix paraphysatis, breviter pedicellatis, 2-4-sporis, 75-80 \times 9-10; spori-

diis recte monostichis subcylindraceis submajusculis, medio 1-septato-constrictulis, intense fuligineis, $20-28 \times 7-8$.

Hab. in culmis emortuis Chusqueæ Quila, Cerro Caracol de Concepcion, Chile Amer. austr.

9. *Valsaria* ? *donacicola* Speg., An. Mus. Nae. Buenos Aires t. XIX 4667 (1909) p. 372. — Stromatibus minutis linearibus, 1-50 mm. long., 250-400 μ . lat., innato-erumpentibus, carbonaceis, matricem plus minusve late sordideque nigrificantibus; peritheciis confertis, subglobosis 90-100 μ . diam., subcarbonaceis obsolete ostiolatis; ascis cylindraceis breviter pedicellatis paraphysatis, octosporis, 70×4 ; sporidiis recte monostichis ellipsoideis $8 \times 3,5$ fuligineis, medio 1-septatis leniter constrictis, loculis subæqualibus v. infero nonnihil minore, non v. 1-guttulatis.

Hab. ad culmos dejectos putrescentes Arundinis Donacis in horto Santa Catalina, prope Buenos Aires Rep. Argentina Amer. austr. — *Vals. insitivæ* Ces. et De Not. simillima sed omnibus partibus duplo minoribus mox dignoscenda.

10. *Valsaria subtropica* Speg., An. Mus. Nac. Buenos Aires t. XIX 4668 (1909) p. 372. — Peritheciis cortice innato-erumpentibus, sparsis v. stromatice aggregatis, submolliusculis, atris, subglobosis, 150-200 μ . diam., ostiolo minute papillulato carbonaceo non vel vix prominulo coronatis; ascis clavulatis, longissime pedicellatis, modice paraphysatis, octosporis parte spor. $45-60 \times 10-12$, pedicello filiformi $80-120 \times 1,5-2$; sporidiis didymis elongato-ellipsoideis, rectis v. vix subnavicularibus, medio 1-septatis leniter constrictis, subopacis fuligineis, $14-16 \times 5-6$, loculis æquilongis pergrosse biguttulatis.

Hab. ad culmos putrescentes Sacchari officinarum nec non ad caules aridos Chænocephali macrophylli, in campis prope Tucuman Rep. Argentina, Amer. austr.

PHÆOSPERMA (Sacc.) Traverso, Fl. ital. Crypt. II, fasc. I (1906) p. 292. — Huc ducendæ sunt sec. Cl. Traverso: *Valsaria anserina* Sacc., *V. cariei* Sacc., *V. Saccardiana* Speg.

1. *Phæosperma* ? *fœniculinum* Spegazz., An. Mus. Nac. Buenos Aires 4669 t. XIX (1909) p. 371. — Peritheciis hinc inde matrice infuscata infossis, ostiolo vix rostellato armatis, subglobosis 120-130 μ . diam., coriacellis; ascis cylindraceis paraphysatis, octosporis, $125-150 \times 10$; sporidiis didymis monostichis ellipsoideis $13-15 \times 8-9$, medio 1-septatis, lenissime constrictulis, fuligineis, subæqualibus eguttulatis.

Hab. ad caules aridos putrescentesque Fœniculi piperiti Santa Catalina prope Buenos Aires Rep. Argentina Amer. austr.

2. *Phæosperma valdiviense* Speg., Fungi Chilense (1910) p. 70, cum icon. — Stromate effuso superficiem matricis extus nigrificante, intus linea atra tenui, repando-sinuosa limitato; peritheciis stromate omnino infossis, laxè gregariis, globulosis, 500-750 μ . d., atris, ostiolo carbonaceo vix papillato exertulo, per ætatem deciduo atque stromata confertiuscule perforato-porosa relinquente, donatis; ascis linearibus dense paraphysatis modice pedicellatis, octosporis, 150-160 \times 9-10; sporidiis subcylindræis v. subelliptico-biconoideis, 1-septato-constrictulis, fuligineis, mediocribus, 18-24 \times 7-8, guttulatis.

Hab. in culmis siccis Chusqueæ valdiviensis, Bahía de Corral, Chile Amer. austr.

3. *Phæosperma leptosporum* Speg., Fungi Chilenses (1910) pag. 69, cum icon. — Peritheciis ligno omnino immersis, globosis minutis submembranaceis, 300-350 μ . diam., ostiolo brevi crassoque superficiem matricis attingente sed non exerto, coronatis; ascis linearibus octosporis, parce paraphysatis, 200 \times 10; sporidiis subrectis monostichis, cylindræo-subfusoides, non v. lenissime subnavicularibus, medio 1-septatis non constrictis, loculis biguttulatis, fumoso-fuligineis, 25-30 \times 5-6.

Hab. in culmis emortuis Chusqueæ Cumingii, Cerro Alegre de Valparaíso, Chile Amer. austr.

ENDOXYLINA Romell — Syll. XI p. 318, XVI p. 508.

1. *Endoxylina eutypoidea* Starb., Ascom. Schwed. Chaco-Cordill. Ex-ped. Arkiv f. Bot. Bd. V (1905) pag. 28. — Stromate obsoleto, cortice nigrificato, forma vix mutato, longe lateque effuso; peritheciis gregariis, corticem protrudentibus, plane immersis, interdum intra matricem confluentibus, ostioliis magnis conoideis, non paullum dilatatis, interdum leniter stellatim sulcatis erumpentibus, 300-400 μ . diam., textura membranacea, dense prosenchymatica, nigra; ascis cylindræis vel cylindræo-clavatis, sursum rotundatis, deorsum longe pedicellatis, 107-127 \times 10-15,5; sporidiis octonis, recte, interdum imbricatim vel nonnullis oblique monostichis vel distichis, primo hyalinis quadriguttulatis, deinde medio septatis, constrictis, loculis conicis, utrinque obtusiusculis vel fere acutatis, fuligineis, 15-16 \times 6,5-7; paraphysibus filiformibus, hyalinis.

Hab. in ramulis aridis Crotonis etc., Tatarenda, Gran Chaco Boliviae.

Sect. 6. Hyalophragmiæ.

HOLSTIELLA P. Henn. — Syll. XIV p. 593.

1. *Holstiella bipindiensis* P. Henn., Engl. Jahrb. XXXVIII (1905) 4673 p. 127. — Stromatibus gregarie sparsis, erumpentibus, innato-superficialibus, angulato-pulvinatis, rugulosis, cinereo-fuscis intus citrinis dein atris, 1,5-2,5 mm. diam., ostiolis plurimis prominulis atris, dein annulato-depressis; peritheciis numerosis omnino immersis, ovoideis, atris; ascis elongato-clavatis, apice obtuse rotundatis, crasse tunicatis, basi pedicellatis, octosporis, 170-260 \times 20-28; paraphysibus filiformibus, ramosis, hyalinis; sporidiis subbi- v. subtristichis, longe fusoides, crasse tunicatis, utrinque obtusiusculis, pluriseptatis (c. 12), constrictis, hyalinis, 40-50 \times 8-10.

Hab. in ramis corticatis, Bipindi Kamerun Africae centralis (ZENKER). — *Hol. usambariensis* P. Henn. affinis sed differt stromatibus, ascis majoribus, sporidiis etc.

CALOSPORA Sacc. — Syll. II p. 231, IX p. 871, XI p. 341, XIV p. 593, XVII p. 717.

1. *Calospora Tamaricis* Maubl., Bull. Soc. Myc. France XXII (1906) 4674 p. 63, cum icon. — Stromatibus corticulis, gregariis, nigris, 1-2 mm. latis, superne applanatis verrucosisque, epidermide circumscissa circumdatis; peritheciis in quoque stromate 5-12, globulosis v. mutua pressione angulosis, 250-300 μ . diam., ostiolo brevi, leniter prominulo; ascis apice attenuato-obtusis, breviter pedicellatis, 100-115 \times 14-16; paraphysibus numerosis, filiformibus, simplicibus, ascos superantibus; sporidiis octonis, distichis, primum lanceolatis, infra medium constricto-septatis, demum utrinque obtusis, rectis v. leniter curvulis, loculo superiore latiore, 2 rarius 3-septato, inferiore 1-2-septato, ad septum primum valde constrictis, ad altera septa leniter, granulosi, hyalinis, 24-28 \times 8-9.

Hab. in ramis emortuis Tamaricis, Pornic Galliae. — Var. *zignoelloides* Patouill. l. c. pag. 63, cum icon. — A typo differt peritheciis solitariis, dense gregariis, superficialibus in ligno decorticato; ascis et sporidiis ut in typo. — In iisdem ramis cum typo.

2. *Calospora ? bahiensis* Spegazz., Micromicetas de los Cacaoyeros, 4675 Rev. Facult. Agronom. y Veter. t. II, La Plata (1906) nn. 4-6,

p. 306, fig. c. — Stromatibus cortice innatis tuberculoso-prominulis, subgloboso-depressis, gregariis sæpe seriatis non vel parce confluentibus 1,5-6 mm. long., 1,5-3 mm. lat., 0,75-1 mm. cr. nigricantibus glabris, margine rotundatis superne convexulis ostioli peritheciolorum non v. vix prominulis nigris, areola candida indefinita latiuscula cinctis, intus subcarbonaceis, fuscis; peritheciis 2-6 in quoque stromate dense constipatis, omnino tectis et ostiolo vix papillato tantum indicatis, globosis, 250-300 μ . cr., crassiuscule membranaceis molliusculis, atris, contextu denso indistincto, fusco-olivaceo; ascis e cylindraceo clavatis antice obtuse rotundatis, postice attenuatis longiusculeque pedicellatis, p. sp. $180 \approx 30$, ped. $50 \approx 8$, paraphysibus filiformibus tenuibus sæpius ramulosis obvallatis, fere semper tetrasporis; sporidiis rectis distichis, fusoidis, majusculis 60-70 \approx 15-18, primo diblastis, serius 9-15-septatis, atque subtoruloso-constrictis, utrinque attenuatis subacutiusculis, hyalinis.

Hab. in cortice *Theobromæ Cacao* L., Bahia de todos los Santos, Brasilia (HEMPERL). — Fungus lichenaceus, gen. *Holstiellæ* affinis.

3. *Calospora oleicola* Speg., Fungi Chilenses (1910) p. 74, cum icon. 4676 — Peritheciis cortice innatis, epidermide disrupta velatis, paucigregariis, stromate parcissimo junctis, globulosis pusillis, vix papillato-ostioliatis, albo-farctis, 150-200 μ . diam.; ascis lanceolatis brevissime pedicellatis paraphysatis octosporis, 100-120 \approx 20, sporidiis e cylindraceo subclavulatis utrinque obtusis, transverse 5-septatis, ad septum medium constrictis, parte infera quam supera conspicue minore, hyalinis, mediocribus, 22-26 \approx 8-9.

Hab. in ramis *Oleæ europææ* quos necat, Quinta Normal de Santiago Chile, Amer. austr.

Sect. 7. Phæophragmiæ.

PSEUDOVALSA Ces. et De Not. — Syll. II p. 135, IX p. 820, XI p. 330, XIV p. 577, XVI p. 527, XVII p. 740.

1. *Pseudovalsa longipes* (Tul.) Sacc. — Syll. II, p. 136 — var. *apiculata* Rick, Broteria, IV (1905) p. 162. — Stromatibus erumpentibus, dein superficialibus, orbicularibus, nigris, 4 mm. diam., margine corticis obvallatis; peritheciis angulatis, ostioli brevibus; ascis longe pedicellatis, parte sporifera usque ad 160-200 μ . longa, 15-18 μ . lata, maturis in apicem filiformem productis; sporidiis

usque ad $50-65 \approx 8-10$, fuligineis, triseptatis, ultimis cellulis hyalinis obtusis, non constrictis, fusoideis, guttulatis; paraphysibus filiformibus hyalinis.

Hab. in ramis *Quercus cocciferæ*, Torres Vedras Lusitaniæ. — Species habitu fere *Diatrypelle quercinæ* et forte *Melogrammati* affini.

2. ? **Pseudovalsa Piri** (Hazsl.) Sacc. et Trav. — Syll. XX, p. 543 4678

Diaporthe Piri Hazsl. Sphaer. Hung. pag. 200, t. XIII, f. 53. — Stromatibus conoideo-hemisphaericis, erumpentibus; peritheciis sat numerosis in ostiola fasciculata, divergentia spiniformia, basi incrassata longa productis; ascis fusoideis brevissime stipitatis; sporidiis subdistichis fusoideis, rectis, utrinque obtusulis, 3-septatis, non constrictis, hyalinis.

Hab. in ramis *Piri communis* in Hungaria. — Sec. auctorem *Diaporthe Strumellæ* affinis.

AGLAOSPORA De Not. — Syll. II p. 133.

1. **Aglaospora aculeata** Petch, Ann. Roy. Bot. Gard. Peradenya. III, 4679

Pt. I (1906) p. 3. — Peritheciis immersis, discretis, 1 mm. diam. vel in stromate nigro carbonaceo aggregatis, 3-5 mm. diam. in collum conicum e cortice emergens 0,75-1,5 mm. productis; ostioliis discretis, rotundis; ascis cylindraceis, apice truncato attenuatis, stipite curvato, quadrisporis, $180-210 \approx 30-35$; sporidiis in medio asco maturato aggregatis, cymbiformibus, $90-105 \approx 12-15$, primum viridi-hyalinis, continuis, plasmate angulato, in guttam albam expulsis, deinde fuligineis, 7-11-septatis.

Hab. in ramis nigrificatis *Theæ viridis*, Ceylon.

TREMATOVALSA Jacobesco, C. R. Ac. d. Sc. Paris CXLII (1906)

pag. 289 (Etym. *Tremato* brevis *Trematosphaerice* et *Valsa*). — Est *Pseudovalsa* sporidiis non appendiculatis. Genus inter *Trematosphaeriam* et *Pseudovalsam* medium, sed ut videtur valde heterogeneum.

1. **Trematovalsa Matruchoti** Jacobesco, l. c. pag. 289. — Peritheciis 4680

solitariis v. in stomate nigro carbonaceo plus minusve congregatis, primum immersis dein superficialibus, piriformibus, collo plus minusve elongato recto v. curvulo præditis, $90-320 \approx 80-230$, parietibus carbonaceis, 10 μ . cr.; ascis octosporis cylindraceis $65-80 \approx 6$; paraphysibus filiformibus ascos æquantibus v. paullo superantibus;

sporidiis fusoides brunneo-olivaceis v. lutescentibus, quadrilocularibus, loculis omnibus grosse 1-guttulatis, 14-16 μ . cr.

Hab. in ramis v. ad truncos, quos rimosos et cancerosos reddit in silvis Valachiæ, Romania. — Verisimiliter status spermogonicus est *Cytospora Tilicæ*, pycnidicus est *Phoma Tilicæ*.

THYRIDARIA Sacc. — Syll. II p. 140, IX p. 821, XI p. 331, XIV p. 578, XVII p. 741.

1. **Thyridaria Cajugæ** Rehm, Ann. Mycol. V (1907) p. 518. — Pe- 4681
 ritheciis sub cortice nidulantibus, valsiformiter 20-30 arcte congregatis, stromatice orbiculariter 1-2 mm. diam. ad apicem nigris collectis et obtectis, per epidermidem prorumpentibus, elongatoglobosis, 0,5 mm. diam., membranaceis, collis elongatis in papillulas subglobosas obtusas, poro perspicuo pertusas abeuntibus; ascis clavatis, 50-60 \times 8-9, octosporis; sporidiis subclavatis, rectis v. subcurvatis, medio constrictis, utrinque obtusis, 4-cellularibus, fusciculis, 10-12 \times 3-3,5, distichis; paraphysibus tenerrimis, subramosis.

Hab. ad ramulum Aceris, Ithaca New York Amer. bor. (W. A. RILEY, comm. Dr. ATKINSON). — *Thyridariæ Comptoniæ* subaffinis.

KALMUSIA Niessl — Syll. II p. 142, IX p. 822, XI p. 331, XIV p. 578, XVII p. 742.

1. **Kalmusia aspera** Morgan, Journ. of Mycol. XI (1905) p. 153. — 4682
 Stromate eutypeo, effuso, indefinito, superficie ob ostiola prominula ruguloso, ligno supra atrato et profundius flavido immerso; peritheciis majusculis, 0,7-1 mm. diam. depresso globosis, nigris, monostichis, immersis, dense confertis et confluentibus, ostiolis breviusculis, rudibus, subcylindraceis, integris; ascis cylindraceis, breviter pedicellatis, 150-180 \times 8-10, octosporis (paraphysatis?); sporidiis elliptico-oblongis, leniter curvis, 3-septatis, 17-21 \times 7-9, cellulis binis interioribus crassioribus et brunneis, apicalibus minoribus et hyalinis.

Hab. in ligno dejecto indurato Gleditschiæ spec., Preston, Ohio Amer. bor.

2. **Kalmusia eucalyptina** Speg., An Mus. Nac. Buenos Aires t. XIX 4683
 (1909) p. 385 — Peritheciis ligno denudato infossis plus minusve prominulis acuteque ostiolatis subseriatis mediocribus, subglobosis sed e latere compressis 300-500 μ . diam.; ascis subfusoides sub-

breviuscule pedicellatis, $120 \approx 12$, octosporis, dense paraphysatis; sporidiis subcylindraceis, primo 1-septatis hyalinis, serius 3-septatis chlorinis, $20-22 \approx 6-8$.

Hab. ad palos vetustos Eucalypti globuli diu intemperiiis expositos, La Plata Rep. Argentina Amer. austr.

3. *Kalmusia coffeicola* Speg., An. Mus. Nac. Buenos Aires t. XIX 4684 (1909) p. 386. — Peritheciis matrice infossis carbonaceis ostiolo non rarius exsertulo armatis, globosis $120-180 \mu$. diam.; ascis subclavatulis breviter pedicellatis $40-60 \approx 9-10$, paraphysatis; sporidiis distichis ellipsoideo-subclavulatis, primo didymis hyalinis serius triseptatis ad septum medium validius constrictulis, $12-15 \approx 4$, e fuligineo olivaceis.

Hab. ad ramos emortuos Coffeæ arabicæ in hortis Orán, Jujuy Rep. Argentina Amer. austr.

4. *Kalmusia ?oranensis* Speg., An. Mus. Nac. Buenos Aires t. XIX 4685 (1909) p. 386. — Peritheciis hinc inde cortice immutato 3-5-gregariis, matrice infossis non vix ostiolo papillulato exserto manifestis, subglobosis 150μ . diam.; ascis clavatis modice pedicellatis $120 \approx 20-22$, octosporis paraphysatis; sporidiis distichis, fusoidis 5-septatis, $40 \approx 10$, non constrictis, fuligineis.

Hab. ad corticem crassiorem ramorum emortuorum Coffeæ arabicæ, in hortis Orán Jujuy Rep. Argentina Amer. austr.

5. *Kalmusia chilensis* Speg., Fungi Chilenses (1910) p. 83, cum icon. 4686 — Peritheciis laxissime gregariis ligno denudato omnino immersis, ostiolo papilliformi vix exserto coronatis, carbonaceis subglobosis parvis, $150-200 \mu$. diam.; ascis cylindraceis brevissime pedicellatis densissimeque paraphysatis, $120-130 \approx 15-16$; sporidiis 3-septatis, ad septum medium tantum leniter constrictis fuligineis, loculis mediis obscurioribus grosse uninucleatis, $20-24 \approx 10-11$.

Hab. in ramis emortuis Proustiae pungentis in collibus prope Batuco Chile Amer. austr.

6. *Kalmusia Lactucæ* Rehm, Ann. Mycol. VII (1909) p. 528, Ascom. 4687 Exsicc. fasc. 45, n. 1865. — Stromate eutypeo, peridermio demum denigrante; peritheciis cortici interiori primitus albo, dein nigrescenti supra lignum demum denigrato innatis, sæpe dense gregariis, interdum subdispersis, semper peridermio tectis, globosis, glabris, contextu membranaceo, papillula minutissima nigra, obtusa, solum in peridermio hemisphærico-elato prominente, $0,15-0,2$ mm. diam.; ascis clavatis, apice rotundatis, $70-75 \approx 12$, 8-sporis; sporidiis ellipsoideis, rectis v. subcurvatis, 3-septatis, ad septa vix constri-

ctis, cellulis plerumque 1-guttatis, fuligineo-fuscis, 18-20 \times 6-7, distichis; paraphysibus filiformibus 2 μ . cr.

Hab. ad basim caulium emortuorum *Lactucæ salignæ* pr. Hadern-Monachium (Doct. REHM).

MELOGRAMMA Tul. — Syll. II p. 144, IX p. 824, XI p. 331, XIV p. 579, XVI p. 527, XVII p. 742.

1. **Melogramma Pirottæ** Bacc., *Funghi Eritrea*, Ann. Bot. vol. IV 4688 (1906) p. 274, tav. X, fig. 1. — Stromatibus atris primitus cylindricis, in cortice nidulantibus dein erumpentibus, ac parte emersa pulvinata, lata mm. 3 et ultra; peritheciis confertis, piriformibus, ostiolo papillato prominulis, monostichis 200 μ . latis; ascis fusoides, sessilibus, aparaphysatis 90 \times 18; sporidiis fusiformibus omnino atris, initio bilocularibus, dein 3-5-septatis, medio constrictis, 45 \times 9.

Hab. in ramis languentibus *Euphorbiæ* spec. in *Erythræa* (BALDRATI).

2. **Melogramma Henriquetii** Briosi et Cav. *Funghi parass. n.* 305 (ex- 4689 sicc.) cum icon. — Stromatibus eximie erumpentibus, subglobosis v. obtuse conoideis, nigris, rugulosis, 1,5-2 mm. diam.; peritheciis sphaeroideis prominulis, ostioli plus minus emergentibus obtusis; ascis clavatis brevissime crasseque stipitatis, apice rotundatis membrana cito diffuente, octosporis; sporidiis distichis v. subtristichis, fusoides, triseptatis, 48-58 \times 10, rectis, utrinque obtusulis, castaneo-fuscis, loculis extimis pallidioribus.

Hab. in cortice *Quercus Suberis* in Algeria (HENRIQUET, nemorum inspector). — A *M. vagante* sporidiis diversis cito distinguitur.

Sect. 8. Hyalodictyæ.

LEUCOTHYRIDIDIUM Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 388 (Etym. *leucos* albus et *Thyridium*, h. e. *Thyridium hyalodictyum*). — Stromata eutypea late effusa nigra. Perithecia matrice omnino immersa, globulosa, sparsa v. confertiuscula. Asci clavati, paraphysati octospori; sporidia muralia hyalina muco vestita.

1. **Leucothyridium crustosum** Speg., l. c. p. 388 cum icon. — Stro- 4690 mate nigro per matricem late ambiente; peritheciis hinc inde laxè gregariis sæpe subseriatis globulosis 150 μ . diam.; ascis breviter pedicellatis, late clavatis, supra crasse tunicatis, 70-80 \times 25, para-

physatis octosporis; sporidiis conglobatis v. subtristichis elongato-
obovatis, didymo-5-septatis, ad septum medium valide constrictis,
20 \approx 10.

Hab. ad ramos emortuos *Coffeæ arabicæ* prope Orán, Jujuy Argentina Amer. austr.

PLEOMELOGRAMMA Speg., An. Mus. Nac. Buenos Aires t. XIX (1909)
p. 389 (Etym. *pleon* plus et *Melogramma* h. e. *Melogramma dictyosporum*). — Stromata superficialia; perithecia minuta dense constipata tecta; asci octospori; sporidia muralia hyalina.

1. **Pleomelogramma argentinense** Speg., l. c. pag. 389, cum icon. — 4691
Stromatibus parvis intus albis lenticulari-tuberculiformibus, 2-5 mm. diam. et 1-2 mm. cr.; peritheciis globosis, coriaceis, atris, 90-120 μ . diam.; ascis sæpius obclavatis, brevissime stipitatis 50-55 \approx 10-15, paraphysatis, octosporis; sporidiis distichis ellipsoideo-fusoides, transverse 5-septatis, longitudinaliter interrupte 1-2-septatis, 15-20 \approx 6-7, ad medium præcipue constrictulis, hyalinis.

Hab. ad truncos ramosque cariosos decorticatos *Eriobotryæ japonicæ*, Santa Catalina prope Buenos Aires Rep. Argentina Amer. austr.

Sect. 9. Phæodictyæ.

THYRIDIDIUM Sacc. — Syll. II p. 323, IX p. 920, XI p. 348, XIV p. 609, XVI p. 553, XVII p. 767.

1. **Thyridium Yerbæ** Speg., Ann. Mus. Nac. Buenos Aires t. XVII 4692 (1908) p. 127. — Peritheciis globosis 250-500 μ . diam., ligno denudato cinerescente omnino immersis; ascis cylindraceis brevissime pedicellatis, apice rotundatis crasseque tunicatis, 150 \approx 10-12, octosporis, dense paraphysatis; sporidiis ellipsoideis oblique monostichis, triseptatis, ad septa, præcipue medium constrictulis, loculis longitudinaliter divis, 16-18 \approx 8-9, fuliginis.

Hab. ad truncos ramosque emortuos decorticatosque *Ilicis paraguariensis* in silva circa S. Pedro Argentina Amer. austr.

2. **Thyridium Sambuci** Earle, Bull. of the New York Bot. Gard. 4693 (1904) p. 294. — Peritheciis areas latas tegentibus, 6-8 in greges dispositis v. sparsis, infossis nigris, carbonaceis, non collabescentibus, 300-400 μ . diam., ostiolo erumpenti, minute papillato, liberis (non valsiformibus); ascis cylindraceis, stipitatis, 150-200 \approx 17-20; paraphysatis.

physibus copiosis, filiformibus; sporidiis monostichis, fuscis, ellipsoideis, sæpe curvulis, 5-septatis, septo medio constrictis, uno v. pluribus cellulis mediis verticaliter divisis, 30-35 \times 10-14.

Hab. in ramis emortuis Sambuci, Snow Valley Peak, Ormsby Co. Nevada Amer. bor. (C. F. BAKER).

3. *Thyridium valparadisiacum* Speg., Fungi Chilenses (1910) p. 93, 4694 cum icon. — Peritheciis ligno omnino infossis, lenticularibus, e latere sæpius compressulis, membranaceis, nigris, ostiolo minuto ægre perspicuo superficiem matricis attingente donatis, 150-200 μ . diam.; ascis e cylindraceo subclavulatis brevissime pedicellatis, octosporis, 150 \times 20-22, paraphysibus filiformibus ramulosis obvallatis; sporidiis ellipsoideo-didymis, utrinque subacutiusculis, transverse 7-, longitudinaliter 1 v. 2-septatis, mediocribus, olivaceis.

Hab. in ramis emortuis Lobeliæ salicifoliæ, Cerro Alegre de Valparaiso Chile Amer. austr.

4. *Thyridium argentinense* Speg., An. Mus. Nac. Buenos Aires t. XIX 4695 (1909) pag. 399. — Peritheciis ligno immutato totaliter infossis ostiolo vix papillato-prominulo manifestis, globosis, 150-180 μ . diam.; ascis subclavulatis breviter pedicellatis, 100 \times 16-18, dense longeque paraphysatis, octosporis; sporidiis ellipsoideis mono- v. distichis, transverse 7-septatis, septo longitudinali unico, olivaceis, 22-24 \times 9-10.

Hab. ad ramos emortuos Ricini communis in sepibus La Plata Rep. Argentina Amer. austr. — *Th. platensi* Speg. valde affinis species, notis tamen plurimis, ut videtur, distincta.

5. *Thyridium coffeicola* Speg., An. Mus. Nac. Buenos Aires t. XIX 4696 (1909) pag. 389. — Peritheciis cortice crassiore omnino infossis ostiolo vix papillato coronatis, solitariis v. laxe gregariis, globosis, 0,8-1,2 mm. diam., carbonaceis; ascis clavatis, diffluentibus, dense pseudoparaphysatis, octosporis; sporidiis cylindraceo-subellipsoideis, di-tristichis, 50 \times 15, transverse 7-9-septatis, septo altero longitudinali interrupto donatis, fuligineis.

Hab. ad truncos ad ramos vetustiores Coffeæ arabicæ, Orán, Jujuy Argentina Amer. austr.

6. *Thyridium cacheutense* Speg., An. Mus. Nac. Buenos Aires t. XIX 4697 (1909) p. 399. — Peritheciis laxè gregariis, ostiolo papillato erumpente vix manifestis, subglobosis, 250-300 μ . diam., matricem intus pulchre roseo tingentibus; ascis subclavatis basi pedicello brevi crassoque suffultis, octosporis, 120-130 \times 18-20, paraphysibus densissime obvallatis; sporidiis oblique distichis, sæpius biconico-elli-

psoides v. leniter subnavicularibus, 28-33 \times 12-15, transverse 7-longitudinaliter 2-3-septatis primo hyalinis demum fuliginis.

Hab. vulgatum ad ramos crassiores emortuos Baccharidis glutinosæ in alveo fluminis Mendozae prope Cacheuta Rep. Argentina Amer. austr.

FENESTELLA Tul. — Syll. II p. 325, IX p. 922, XI p. 349, XIV p. 610, XVI p. 553, XVII p. 766.

1. **Fenestella præandina** Speg., An. Mus. Nac. Buenos Aires t. XIX 4698 (1909) p. 400. — Stromatibus sæpius irregulariter linearibus 5-20 mm. long., 1-2 mm. cr., gibbulosis atris, perithecia vix prominula ostiolo vix papillato crasso coronata subcarnosulo-coriacella, atra, 300-400 μ . diam., obvolventibus; ascis linearibus paraphysatis, 200-255 \times 18-20, octosporis; sporidiis mediocribus ellipsoideis transverse 3-, verticaliter 1-septatis, lutescenti-olivaceis, 32-34 \times 11-12.

Hab. ad ramos crassiores emortuos Proustiae ilicifoliae in præandinis Cacheuta prope Mendoza, Argentina Amer. austr.

2. **Fenestella subvestita** Ferdinands. et Winge, Botan. Tidsskrift 29 4699 Bd. (1909) p. 313, fig. 5. — Peritheciis denis-vicensis in cortice exteriori circinato-confertis, ostioliis disciformi-conglutinatis per peridermium pustuliformiter levatum erumpentibus, flocco flavidulo parce obsessis, zonula flavo-brunnea, e substantia mutata corticis formata, 1,5-2,5 mm. diam. cinctis; ascis cylindraceis, superne applanato-rotundatis, parte sporifera 100-125 μ . long., 8-10,5 μ . lat., pedicello circ. 25 μ . long. instructis; sporidiis octonis v. rarius quaternis, monostichis, ellipsoideis, transverse crasse 3-septatis, loculo uno ex duobus mediis interdum septo longitudinali obliquo instructo, ad septa vix constrictulis, 15-19 \times 7,5-8,5, griseolo-brunneis, irregulari-guttulatis; paraphysibus numerosis, filiformibus, guttulatis, 3 μ . crass., ascos parum superantibus; pycnidiis parietibus anfractuosus spurie v. omnino multilocularibus, sporulas in basidiis e basi ramosis, 15-20 μ . long., solitarie acrogenas, oblongo-bacillares, 2-3 \times 0,75, hyalinas foventibus.

Hab. ad ramos siccos corticatos Alni glutinosæ in pelude Lyngby Mose dicta prope Hafniam Daniæ.

3. **Fenestella endoxantha** Speg., An. Mus. Nac. Buenos Aires t. XIX 4700 (1909) p. 400. — Stromatibus peridermio innatis, difformibus, extus fuscis intus citrinis, irregulariter sublenticularibus 1,5-2,5 mm. diam., favoso-loculigeris; peritheciis stromate infossis, paucis, globosis 250-400 μ . diam., fulvo-fuscis; ascis linearibus paraphysatis

crassequae pedicellatis, parte spor. $120 \approx 15$, ped. $15-20 \approx 8-10$; sporidiis oblique monostichis, obtusissime ellipsoideis, $20 \approx 10$, transverse 3-, longitudinaliter 1-septatis, primo hyalinis dein subopace fuligineis.

Hab. ad ramos emortuos Casuarinæ strictæ in hortis Claypole prope Buenos Aires Rep. Argentina Amer. austr.

Sect. 10. Scolecosporæ.

CRYPTOSPORA Tul. — Syll. II p. 361, IX p. 339, XI p. 353, XVII p. 776.

1. **Cryptospora Saccardiana** Trav. et Spessa, Bol. Soc. Brot. XXV 4701 (1910) pag. 168, t. I, f. 4. — Pustulis dense sparsis, ellipsoideis, $1\frac{1}{2} \approx \frac{1}{2}-1$ mm., albescentibus; stromate cortice nidulante, tenui, nigro; peritheciiis 2-3 stromate basi tantum immersis, globulosis, $140-160 \mu$. diam., contextu melleo tenui, collibus late conoideis peridermium pustulatim sublevantibus et demum perforantibus; ascis ellipsoideis vel late fusiformibus, subsessilibus, membrana tenuissima præditis, octosporis, $90-120 \approx 25-35$; sporidiis parallele fasciculatis, cylindræco-vermicularibus,asco paullo brevioribus, utrinque rotundatis, leniter curvatis vel subrectis, 2-5-septatis vel pseudo-septatis, initio hyalinis dein vix fuscidulis, $70-100 \approx 6-8$.

Hab. in ramis Cinnamomi dulcis in Horto Botanico conimbricensi Lusitanicæ (A. MOLLER).

2. **Cryptospora suffusa** (Fr.) Tul. — Syll. II, p. 361. — var. **validoides** Rehm, Ann. Mycol. IV (1906) p. 476. — A typo differt peritheciiis magis copiosis (12-18), stromate nigro prorumpente, usque ad 3 mm. longo; ascis angustioribus $8-9 \mu$. lat.

Hab. in ramis emortuis Alni viridis, Wechsel Austriæ inf. (v. HÖHNEL).

3. **Cryptospora chilensis** Speg., Fungi Chilenses (1910) p. 96, cum 4703 icon. — Stromatibus ligno denudato subcinerescente innato-insidentibus, vix prominulis, parvulis, ellipsoideis, cinereo-fuscis; peritheciiis in quoque stromate paucis (2-5) majusculis omnino immersis, circinantibus, $700-750 \approx 300$; ascis linearibus breviter pedicellatis paraphysatis, $500 \approx 10-11$; sporidiis filiformibus multiseptatis perdilute chlorinis, ascos subæquantibus, loculis singulis $10 \approx 2$.

Hab. in ramis siccis Proustiae pungentis in collibus prope Batuco Chile Amer. austr.

WINTERELLA Sacc. — Syll. II p. 364, XIV p. 620.

1. **Winterella Yerbæ** Speg., Ann. Mus. Nac. Buenos Aires t. XVII 4704 (1908) p. 128. — Peritheciis sparsis v. laxè gregariis ligno dealbato omnino immersis, globosis, 250-400 μ . diam., membranaceis; ascis cylindraceo-fusoides antice acutiusculis rotundatis crasseque tunicatis postice sensim breviterque cuneato-pedicellatis, 120-150 \times 10-12, octosporis, laxè tenuissimeque paraphysatis; sporidiis fasciculatis filiformibus multiseptulatis, hyalinis, 100-120 \times 2-2,5.

Hab. ad ramos aridos decorticatos Illicis paraguariensis circa S. Pedro Rep. Argentina Amer. austr.

2. **Winterella platensis** Speg., An. Mus. Nac. Buenos Aires t. XIX 4705 (1900) p. 403. — Stromatibus effusis, repando-ellipsoideis, 2-10 mm. long., 1,5 mm. lat., primo tectis dein superficialibus, atris levibus; peritheciis sub cortice stromatice dense constipatis, sublentularibus 150-250 μ . diam.; ascis fusoides, basi breviter attenuato-pedicellatis, 100 \times 12-13, aparaphysatis, octosporis; sporidiis acicularibus 70-80 \times 3, multi-guttulatis, hyalinis.

Hab. ad ramos aridos, frigore hiemali enecatos Pircuniæ dioicæ in silva Santa Catalina Rep. Argentina Amer. austr.

3. **Winterella Rickiana** Rehm, Ascom. exs. n. 1741 (1907), Ann. Myc. 4706 V (1907) p. 470. — Stromatibus superficialiter innatis, orbicularibus, maculatim plus minusve dispersis v. congregatis, plerumque in longitudinem ramuli expansis, atris; peritheciis 3-5 (rarius pluribus) innatis verrucoso-elevatis, c. 2 mm. diam.; peritheciis globulosis, membranaceis, parenchymatice contextis, glabris, 300 μ . circ. lat., ostiolo subconoideis, poro perspicuo demum pertusis; ascis cylindraceis, versus apicem angustatis, 120 \times 8-10, tetrasporis; sporidiis filiformibus, rectis, hyalinis, obtusis, pluries septatis, c. 90 \times 3, parallele positis; paraphysibus longis, septatis, hyalinis, 4 μ . cr.

Hab. in arbore ignoto vulgo «Achaete» Sao Leopoldo Rio Grande do Sul Brasilia (Rick S. J.).

SILLIA Karst. — Syll. II p. 361.

1. **Sillia biformis** Rick, Broteria V (1906) p. 49. — Stromate pulvi- 4707 nato, 1-3 cm. diam., brunneo hypoxylideo, superficiali, intus flavo-viridulo; peritheciis aggregatis, primitus in stromate nidulan-

tibus collo pertuso, demum superficialibus, atris, coriaceo-rigidis, rugulosis, subhirsutis, 0,5 mm. latis, ostiolo brevi aut longiusculo; ascis 70-80 \approx 6-8, sessilibus; sporidiis filiformibus, 60 \approx 2, hyalinis v. subflavidulis, septatis, apicibus acutis, curvulis, octonis; paraphysibus dilutis.

Hab. in ramo corticato, Rio Grande do Sul Brasilæ. — In stromate juniore inveniuntur conidia ovalia, 10 \approx 6, fuliginea, unicellularia.

Fam. 6. Pseudosphæriaceæ v. HÖHNEL.

PSEUDOSPHERIACEÆ v. Höhnel Sitzb. k. Ak. d. Wiss. Wien Bd. CXVI (1907) Abt. I, Fragm. z. Myk. III, p. 129 et IV (1907) p. 631. — Stromata minuta, immersa, perithecioidea, plurilocularia. Asci singuli in quoque loculo; sporidia varia. Familiola, ut videtur, inter Sphæriaceas et Dothideaceas media. — Teste von Höhnel, præter *Pseudosphæriam* et *Wettsteininam*, huc quoque pertinent *Scleroplea* Sacc. et *Pyrenophora* Fr.

WETTSTEININA v. Höhnel, Fragm. z. Mykol. III, Sitzb. k. Ak. d. Wiss. Wien, Bd. CXVI, Abt. I (1907) p. 126 (Etym. ab Eq. R. Wettstein prof. vindobonensi). — Stroma minutum, rotundatum v. discoideum, immersum, dein epidermide lacerata liberum, nigrum, perithecioideum, pseudoparenchymate polyedrico constitutum; loculi parci, unistratosi, ascum unicum ovoideum octosporum limitantibus; sporidia hyalina, bilocularia, cellulæ inæqualiter crasse intus ob 1-3 annulos parum prominentes simulate divisæ. — Huc ducentæ sunt species (saltem teste von Höhn. l. c. CXVI (1907) p. 129 et 635): *Massarina gigantospora* Rehm — Syll. IX, p. 825 — *Leptosphaeria mirabilis* Niessl — Syll. II, p. 33 — *Sphaerulina callista* var. *Vossii* Rehm — Syll. IX, p. 847.

1. **Wettsteinina gigaspora** v. Höhnel, Fragm. z. Mykol. III, Sitzb. 4708 k. Ak. d. Wissensk. Wien Bd. CXVI, Abt. I (1907) p. 126, tab. 1, fig. 1 a-e (sub nomine *W. alpina*!). — Stromatibus sparsis carbonaceis, nitidis, nigris, 500-700 μ . lat., 260 μ . cr.; hypothecio 60-70 μ . cr. contextu sterili 150-200 μ . lato; loculis 5-6, irregulariter ovoideis;asco parietibus usque ad 15 μ . cr., irregulariter ovoideo, plerumque octosporo, 180-240 \approx 120-140; sporidiis con-

globatis, hyalinis, utrinque rotundatis, 120×44 , bilocularibus, tunica duplici interna tenui cum lineis anuliformibus parum prominentibus, externa 8 μ . circ. cr.; contextu minute granuloso.

Hab. in caulibus siccis Monocotyledoneæ cujusdam prope Gurschewy et Cej in Romania (LOITLESBERGER).

PSEUDOSPHERIA von Höhnelt, *Fragm. z. Mykol., Sitzb. k. Ak. d. Wiss. Wien*, Bd. CXVI, Abt. I (1907) pag. 129 et 635 (Etym. *pseudos* falsus *Sphaeria*). — A genere *Wettsteinina* distinguitur imprimis sporidiis genuine plurilocularibus, non bilocularibus et tantum polyblastis. — Ad hoc genus, teste v. Höhn., spectant *Sphaerulina callista* Rehm — Syll. II, p. 188 — et *Leptosphaeria pachyasca* Niessl — Syll. II, p. 171 (Metasphaeria).

Fam. 7. Dothideaceæ NITSCHKE

Sect. 1. Allantosporæ.

DOTHIDEOVALSA Speg., *An. Mus. Nac. Buenos Aires t. XIX* (1909) p. 414 (Etym. *Dothidea* et *Valsa* inter quas media). — Stromata innato-erumpentia tumidula atra; loculi minuti immersi albo-farcti; asci clavulati octospori; sporidia parva, allantoidea curvula, hyalina.

1. **Dothideovalsa tucumanensis** Speg., l. c. pag. 414. — Stromatibus linearibus erumpentibus 1-10 mm. long., 1-1,5 mm. cr., sæpius dense gregariis et ramulum late ambientibus, intus extusque nigris, glabris, levibus v. vix rugulosis, oculis globosis vix papillato-ostiolatis; ascis clavulatis $18-20 \times 3$, aparaphysatis; sporidiis 2-3-stichis, cylindræis curvulis, utrinque rotundatis $4-6 \times 1$, primo hyalinis serius subchlorinis.

Hab. vulgata ad ramulos vivos Chætothylacis tocantini in Parque Roca, Tucuman, Argentina Amer. austr.

Sect. 2. Hyalosporæ.

BAGNISIELLA Speg. — Syll. II p. 589, IX p. 1004, XVI p. 616.

1. **Bagnisiella Rübsaameni** P. Henn., *Hedwigia XLVII* (1908) p. 268. 4710 — Stromatibus cauliculis tumefacientibus, erumpentibus, cæspitosis,

subgloboso-confluentibus, subcoriaceis, atro-fuscis, loculis immersis, subovoideis; ascis clavatis apice rotundatis, tunicatis, 8-sporis, $80-100 \approx 20-26$; paraphysibus copiosis, hyalinis; sporidiis oblonge ellipsoideis, clavatis v. subfusoides, utrinque obtuso-rotundatis, continuis, hyalinis, $20-32 \approx 9-12$.

Hab. in ramis Cassiæ sp., Surinan, Rio Pará Amer. merid. (MICHAELIS).

2. **Bagnisiella Uncariæ** (Rac.) Sacc. et Trott., *Botryosphæria Uncariæ* 4711
Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 393. — Stromatibus epiphyllis, nigris, rotundatis 0,5 mm. alt., 1-3 mm. latis, medio depressis et sæpe centro perforatis; peritheciis circulariter dispositis, globosis $350-500 \mu$. lat., excipulo vix discreto, ad marginem stromatis immersis, ostiolo minuto, impresso; ascis breviter clavatis octosporis; sporidiis ovoideis utrinque rotundatis, rectis v. leniter flexis, continuis, hyalinis, levibus, $19-24 \approx 8-11$.

Hab. in foliis Uncariæ spec. prope Soekanegara-Preanger ins. Javæ.

3. **Bagnisiella tjampeana** (Rac.) Sacc. et Trott., *Botryosphæria tjampeana* 4712
Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 392. — Hypophylla; stromatibus extus nigris, intus albido-brunneis, $680-800 \mu$. diam. peritheciis copiosis, globosis, $300-340 \mu$. diam., stromate immersis, ostioloque $200-220 \mu$. longo, in stromatis superficiem dehiscente, papillaque depressa præditis; ascis aparaphysatis, stipatis, octosporis $38-43 \approx 10-12$ (in medio); sporidiis in medio asco cruciatim positis, continuis, levibus, hyalinis, ovoideis, $9-11 \approx 3-4$.

Hab. in foliis Malloti Blumeani, ad gallas globulosas nervicolas, Tjampea pr. Buitenzorg ins. Javæ.

4. **Bagnisiella Molluginis** (v. Höhn.) Sacc. et Trott., *Botryosphæria Molluginis* v. Höhn., Sitzb. k. Ak. Wien, CXV, Abt. I (1906) pag. 18. — Stromatibus sparsis, erumpentibus subrotundis v. oblongis, discoideis, epidermide cinctis, nigris, carbonaceo-molliusculis, subinde concaviusculis, 0,5-1 mm. lat., 260μ . cr., cellulis polyedricis, 25μ . diam.; loculis copiosissimis (50-70) unistratosis, ovato-oblongis, $100 \approx 50-80$; ascis copiosis, clavatis, sessilibus, $60-80 \approx 8-10$, 6-8-sporis; sporidiis ellipsoideo-fusiformibus, utrinque obtusulis, $14-18 \approx 5-7$, hyalino-farctis, eguttatis.

Hab. in caulibus emortuis Galii Molluginis in comit. Pressburg Austriæ (A. ZAHLBRUCKNER). — E descriptione, a typo generis (*B. Bérengeriana*) loculis omnino immersis longe recedit.

5. **Bagnisiella anceps** (v. Höhn.) Sacc. et Trott., *Botryosphæria an-* 4714

ceps v. Höhn. Fragm. Mykol. VII (1909) p. 28. — Stromatibus superficialibus, nigris, rugulosis, perithecioides, inæqualiter globosis, depressiusculis, sparsis v. minute aggregatis, basi angustata sessilibus, 360-500 \times 300-360, intus 1-locularibus, cortice carbonaceo 40-100 cr., extus rugoso, cellulis 20 μ . diam. nigris conflato; loculo astomo, vertice diffracto-dehiscente; ascis copiosis, crasse clavato-fusoideis, superne crasse tunicatis, rotundatis, deorsum in stipitem 40 μ . long., filiformem tenuatis, octosporis, 105-150 \times 22-32; sporidiis subdistichis, teneris, minute flavido-granulosis, continuis, versiformibus, ex ovoideo fusoideis, utrinque obtusis, 22-28 \times 11-17; paraphysibus genuinis nullis

Hab. in ramis tenellis emortuis, Sao Paulo Brasiliæ (WETTSTEIN et SCHIFFNER). — A typo *Botryosphæria* omnino desciscens.

OXYDOTHIS Penz. et Sacc. — Syll. XIV p. 674.

1. *Oxydothis insignis* Spegazz., Fungi Paulist., Rev. Mus. La Plata 4715 t. XV (1908) p. 26, fig. G. — Stromatibus parenchymate innatis, repando-suborbicularibus 1-2,5 mm. diam., duriusculis subcarbonaceis, intus extusque nigerrimis, ad epiphyllum vix prominulis sæpius obsoletis, cinerescenti-squarrulosis punctulatis v. concaviusculis, ad hypophyllum pulvinulatis non v. vix bullosis, semper maculis sordide fusco-ferrugineis latiusculis subdeterminatis cinctis; loculis globosis v. e mutua pressione angulatis, 125-175 μ . diam., nucleo albo farctis, ad hypophyllum adpressis, ostiolo minuto perforatis; ascis antice obtusis crassiusculeque tunicatis postice cuneatis breviuscule pedicellatis, 100-120 \times 15-20, paraphysibus filiformibus sublongioribus obvallatis; sporidiis distichis v. conglobatis utrinque acutissimis 4-blastis 55-60 \times 8, serius forsán didymis, 40 \times 8, fusoideis, sublunatis v. sigmoideis, utrinque appendice elongato-cônoidea 10-12 μ . auctis, semper tamen hyalinis.

Hab. ed folia Eugeniæ cujusdam prope Ipiranga Moça Brasilia (USTERI).

2. *Oxydothis pertusarioides* Rehm, in Ann. Mycol. V (1907) p. 530. 4716 — Stromatibus dense gregariis, ovato-orbicularibus, applanatis, in cortice griseo-albo rugosulo prominenter innatis ab eoque obductis, intus griseis, 1-1,5 mm. lat., 1 mm. alt., loculis in quoque stromate 2-3 oblongis, 0,3-0,5 μ . long., apice angustatis et in disculum punctiformem nigrum, impressum abeuntibus, contextu stromatis et hypothecii griseo-albo, crasso, parenchymatico, gonidiis carente; ascis clavatis, crasse tunicatis, apice rotundatis, circiter

150-180 \approx 50-60, octosporis; sporidiis oblongo-fusiformibus, utrinque rotundatis, rectis vel subcurvatis, 1-cellularibus, hyalinis, episporio 5-6 μ . cr. intus granulosis, dilutissime flavidulis, 110-115 \approx 23-30, distichis; paraphysibus ramosis, septatis, 5 μ . cr., hyalinis; epithecium dilutissime fuscidulum formantibus. — Jodii ope asci toti valde caeruleo tinguntur.

Hab. ad ramulum, Alta da Serra, S. Paulo, Brasilia (USTERI).

— Habitus lichenoides; a typo *Oxydothidis* sporidiis utrinque rotundatis recedit, hinc quoad genus dubia stirps.

PHYLLACHORA Nits. — Syll. II p. 594, IX p. 1006, XI p. 368, XIV p. 663, XVI p. 617, XVII p. 828.

1. *Phyllachora Erythroxyli* Rehm, Annal. Mycol. VI (1908) p. 318. 4717
— Stromatibus punctiformibus, epiphyllis, in folio haud decolorato gregariis, late dispersis, sensim 2-5 lineariformiter connatis, circinantibus, 0,15-0,3 mm. diam., subconoideis, sessilibus, poro perspicuo pertusis, atris; ascis fusiformibus, 50-60 \approx 12-14, octosporis; sporidiis fusoides, utrinque acutatis, rectis, hyalinis, 1-cellularibus; 20-22 \approx 4, bi-tri-stichis; paraphysibus mucosis.

Hab. ad folia *Erythroxyli* suberosi, Villa Mariana, Sao Paulo Brasiliæ (USTERI) — Habitus potius *Physalosporæ*; affinis *Phyll. Collææ* et *Ph. Condaliæ*.

2. *Phyllachora corallina* von Höhn. Fragm. Mykol. VII (1909) in 4718 Sitzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, p. 845. — Maculis nullis; stromatibus hypophyllis, omnino adnatis, depressis, nigris, nitidulis rugulosis, æqualibus, ostiolo plus minus depresso v. leviter 30-40 μ . lato præditi, 200-250 μ . diam., rotundatis v. usque ad 1,5 cm. elongatis, dentritice-coralloideo-reticulato ramosis; contextu stromatis parenchymatico; loculis laxiusculis infra depressis, supra conoideo-angustatis, 160-230 μ . latis et altis; ascis cylindraceis, breviter stipitatis, 70-80 \approx 5-6; paraphysibus filiformibus, paucis v. nullis; sporidiis monostichis, hyalinis, ellipsoideis, utrinque acutatis, 8 \approx 4.

Hab. in foliis vivis verisimiliter Rutaceæ cujusdam (? Clausena, ? Murraya), in silva primæva pr. Tjibodas in ins. Java (SCHIFFNER).

3. *Phyllachora intermedia* Speg. — Syll. IX, p. 1012 — var. *luxu-* 4719
rians Rehm, Ascom. Exsicc. fasc. 37, n. 1660, Ann. Mycol. IV (1906) pag. 406. — Stromatibus cauliculis, magnis, gallæformibus,

eximie papillatis, usque ad 3 cm. longis et latis, usque ad 2 cm. altis.

Hab. in ramulis Sapindaceæ, Sao Leopoldo Rio grande do Sul, Brasilia (J. RICK).

4. *Phyllachora duplex* Rehm, Ann. Mycol. VI (1909) pag. 538. — 4720

Stromatibus in centro macularum orbicularium demum confluentium, tenuissime fuscidulo-cinctarum, arescendo albo-roseolarum, 0,8-1 cm. diam., sessilibus, epiphyllis, haud conspicuis in hypophyllo, irregulariter orbicularibus, 0,3-0,5 mm. diam., verruculosus, atris, haud nitentibus; loculis innatis 12-15, globosis, papillula minutissima prominentibus; ascis cylindraceis $120 \approx 15$, octosporis, J-; sporidiis ellipsoideis, utrinque rotundatis, unicellularibus, guttas oleosas 2 magnas includentibus, hyalinis, $18 \approx 10$, monostichis; paraphysibus ramosis, 3 μ . cr.

Hab. ad folia Serjaniae, Sao Leopoldo Rio Grande do Sul Brasiliæ (THEISSEN S. J.). — *Dothidella Serjanæ* affinis sed omnino diversa. In ramulis adest *Euryachora duplicata* Rehm n. sp.

5. *Phyllachora Leeæ* Koord., Botan. Untersuch. (1907) pag. 182. — 4721

Stromatibus amphigenis, tectis, vix erumpentibus, sparsis, pulvinatis, 1-1,5 mm. diam., atris, coriaceis, folii pilis persistentibus laxè echinulatis; loculis subglobosis, vix ostiolatis; ascis cylindraceis 100-140 \approx 10-15 octosporis; sporidiis uniseriatis, continuis, hyalinis, ellipsoideis, utrinque acutis v. obtusis, 12-15 \approx 7-8; paraphysibus filiformibus continuis, hyalinis, ascos æquantibus.

Hab. in foliis vivis Leeæ rubræ prope Gombong, Java (KOORDERS).

6. *Phyllachora Canarii* P. Henn., Hedwigia XLVII (1908) p. 254. — 4722

Stromatibus amphigenis gregarie sparsis, rotundatis, planis, 1,5-2,5 mm. diam.; atris, subverrucoso-ostiolatis; loculis immersis subglobosis plurimis; ascis clavatis vertice obtusiusculis, paraphysatis, 8-sporis, 50-80 \approx 7-10; sporidiis oblique monostichis v. subdistichis, oblonge subfusoides, utrinque obtusis, guttulatis, hyalinis, 10-15 \approx 3,5-4.

Hab. in foliis Canarii luzonici, Semerara ex insulis Philippin. (MERRILL).

7. *Phyllachora ? Aberiæ* P. Henn., Engl. Bot. Jahrb. XLI (1908) 4723

p. 272. — Stromatibus amphigenis, gregarie sparsis, pulvinatis rotundatis, atro-nitentibus, ca. 1 mm. diam.; ascis clavatis, obtusis, paraphysatis, c. 80-110 \approx 10-12; sporidiis subdistichis, oblongis, hyalinis (immaturis).

Hab. in foliis *Aberiaë caffræ*, Uitenhage, Transvaal Africae (EVANS).

9. *Phyllachora peribebuyensis* Speg. — Syll. IX, pag. 1017 — var. 4724
brachycarpa Spegazz., Fungi Paul, Rev. Mus. La Plata t. XV, p. 25. — Stromatibus pulvinato-superficialibus medio substipitato-adfixis ut in *Coccoidea* P. Henn. Specimina quæ adsunt a typo recedunt sporidiis nonnihil brevioribus, 10-14 \approx 5-7.

Hab. ad folia languida *Melastomaceæ* ejusdam prope Sao Paulo, Brasilia (USTERI).

9. *Phyllachora aggregatula* Syd., Ann. Mycol. VIII (1910) p. 38. — 4725
 Stromatibus epiphyllis, in hypophyllo haud conspicuis, sine maculis, minutis, c. $\frac{1}{3}$ mm. diam., plerumque compluribus in greges minutas irregulares laxè dispositis, plerumque tantum 1-locularibus, atris, nitidis, rotundatis, hemisphærico-prominulis; ascis clavatis, 40-55 \approx 14-18, octosporis; sporidiis oblique mono-distichis, ellipsoideis, utrinque rotundatis, continuis, hyalinis, guttulatis, 10-14 \approx 5-7.

Hab. in foliis vivis *Melastomatis fusci*, Mount Marideles, Bataan, prov. Luzon in ins. Philippinensibus (E. D. MERRILL).

10. *Phyllachora Petitmenginii* P. Maire, Ann. Myc. VI (1908) p. 150, 4726
 fig. 6, tab. I, fig. 5. — Stromatibus epiphyllis, interdum totam folii crassitudinem occupantibus et in pagina inferiore præminentibus, in macula fulvida solitariis, nigris, nitentibus, levissimis, convexo-prominulis, plerumque rotundatis vel ellipticis, 0,75-1,5 mm. diam.; loculis 2-6, subglobosis; ostiolis minute papillatis; ascis octosporis, clavatis vel subfusoides, parte sporifera 80-110 \approx 20-25, basi in pedicellum filiformem usque ad 60 μ . longum contractis; sporidiis distichis, oblongo-cylindraceis; hyalinis, levibus, utrinque rotundatis vel obtusis, 26-33 \approx 7-8; paraphysibus filiformibus.

Hab. in foliis *Myrtaceæ* ejusdam, Garuja prope Santos, Brasilia. — *Phyll. Tonduzii* suaffinis.

11. *Phyllachora Lindmani* Starb., Ascom. Schwed. Chaco - Cordill. 4727
 Exp., Arkiv f. Bot. Bd. V (1905) p. 13, fig. 9. — Stromatibus epiphyllis, ascigeris applanatim pulvinatis, irregulariter costato-rugosis vel tuberculatis, varie determinatis, undulatis vel lobatis, sæpe rhombiformibus, nitidulis, nigris, 3-10 mm. latis; stromatibus pycnidicis aliis circumstantibus, aream sæpissime rhombiformem limitantibus, peripherice ramosis, crustaceis vel submembranaceis, aliis sed rarius solitariis elliptice vel varie limitatis, maculis fuscis, arescendo folii obscurioribus insidentibus; sporulis hyalinis, allan-

toideis, $5-9 \approx 1,5$ tectis, griseo-farctis, astomis, tuberculatim prominentibus, forma varia, plerumque undulato-lobata determinatis, 400-500 μ . diam.; contextu coriaceo-carbonaceo, denique pulveraceo; ascis crasse cylindræis, sursum obtusatis vel fusiformibus, utrinque attenuatis, $75-90 \approx 9-16$; sporidiis octonis, valde variantibus, plerumque ellipsoideis, non raro elongatis et curvulis, conglobatis vel distichis, hyalinis, $16,5-25 \approx 6,5-9$; paraphysibus filiformibus, numerosissimis.

Hab. in foliis Myrtaceæ, Sao Paulo, Cruz Alta, Brasilia (LINDMAN). — Quoad habitum *Rhytisma* in memoriam revocans, ob perithecia autem etiam jam evacuata non rimosim dehiscentia ad *Phyllachoram* ducenda est hæc distincta species. *P. rhytismoides* Cda, cui sec. specimen a Berkeley determinatum species hæc affinis, sec. figuram tamen apud Corda (Ic. fung. IV, 42 fig. 122) plane divergit.

12. *Phyllachora Ipirangæ* Speg., Fungi Paulist., Rev. Mus. La Plata 4728 t. XV, p. 24. — Maculis nullis; stromatibus planissimis, 1 mm. diam., vix prominulis eximie determinatis intus extusque nigris, levibus; loculis pusillis 100-120 μ . dirm., albo-nucleatis poro minutissimo ad epiphyllum perforatis; ascis apice subtruncato-rotundatis crassiusculeque tunicatis, medio v. parum infra subincrassatis, basim versus cuneato-attenuatis, in pedicellum brevem productis 80-90 $\approx 10-12$, paraphysibus filiformibus longioribus obvallatis; sporidiis mono- v. distichis utrinque subacutiuscule rotundatis $15-16 \approx 8$, primo grosse 1-2-guttulatis dein continuis, hyalinis.

Hab. ad folia languida Eugeniæ cujusdam, Ipiranga Moça Brasilia (USTERI). — Species a cæteris in *Myrtaceis* vigentibus, cognitis, distinctissima.

13. *Phyllachora biguttulata* Theiss., Beih. Bot. Centralbl. Bd. XXVII 4729 (1910) Abt. II, p. 390. — Maculis brunneis irregularibus 3-6 mm. diam.; stromatibus opposito-amphigenis, 2-4 mm. diam. circularibus v. irregularibus, crassiuscule pulvinatis subnitentibus, papillis minutis sparse punctatis; loculis plane immersis, subglobosis; ascis cylindræis, breviter stipitatis, p. sp. 50-65 $\approx 8-10$, supra rotundatis; sporidiis monostichis, hyalinis, continuis, rectis, ellipsoideis utrinque rotundatis, $10-12 \approx 5-5,5$, guttulis 2 nitidis specie septatis.

Hab. in foliis vivis Campomanesiæ rhombeæ in silva Sao Leopoldo Rio Grande do Sul Brasiliæ. — A *Phyllach. opposita* Henn. cui affinis, imprimis differt ascis et sporidiis.

14. **Phyllachora Myrrhīnii** Theiss., Beih. Bot. Centralbl. Bd XXVII 4730 (1910) Abt. II, p. 390. — Stromatibus epiphyllis, in hypophyllo nullatenus visibilibus, maculis fuscis tenuissimis insidentibus, minutis, vix 1 mm. diam., raro æqualiter pulvinulatis et plurilocularibus (3-5), plerumque unilocularibus, applanato-conoideis, opacis, vertice subnitidis, papilla vix visibili nisi in plurilocularibus; ascis clavatis, pedicellatis, supra rotundatis, p. sp. 55-72 \times 12-16, pedicello c. 12-15 μ . longo; sporidiis plerumque distichis, tunica mucosa tenuissima involutis, hyalinis, rectis, ellipsoideis, utrinque rotundatis, initio 2-guttatis et specie septatis, dein eguttatis homogeneis (intus non granulatis), 14-16 \times 5 v. 12-14 \times 6-6,5.
Hab. in foliis vivis Myrrhīnii rubriflori in silvula Sao Leopoldo, Rio Grande do Sul Brasilæ.
15. **Phyllachora Bakeriana** P. Henn., in Rehm Ascom. exs. fasc. 42, 4731 n. 1788; Ann. Mycol. VI (1908) p. 488. (Nomen nudum).
Hab. in Cassia Hoffmannseggii, Parà Brasilia (C. F. BAKER).
16. **Phyllachora luzonensis** P. Henn., Hedwigia XLVII (1908) p. 255. 4732 — Maculis effusis, fuscidulis; stromatibus amphidymis angulato-rotundatis, sparsis v. gregarie confluentibusque planis, atris; loculis immersis, numerosis, ostiolis hypophyllis, verrucoso-prominulis; ascis clavatis, vertice obtusis, paraphysatis, 8-sporis, 60-80 \times 5-6; sporidiis ellipsoideis interdum ovoideis, hyalinis, 8-11 \times 3,5-4.
Hab. in foliis Milletiæ Merrilli, Luzon, Maragondong ins. Philippin. (MERRILL).
17. **Phyllachora Parkiæ** P. Henn., Hedwigia XLVII (1908) p. 255. 4733 — Maculis rotundatis v. effusis, flavo-fuscidulis; stromatibus epiphyllis sparse gregariis interdum confluentibus, minutis, pulvinatis, atro-nitentibus, loculis paucis immersis, globulosis; ascis clavatis, apice obtuso-rotundatis, paraphysatis, 8-sporis, 45-70 \times 8-12; sporidiis ellipsoideis, obtusis, oblique monostichis v. subdistichis, 2-guttulatis, hyalinis, 7-10 \times 5-6.
Hab. in foliis Parkiæ Roxburghii, Luzon, Prov. Bataan Lamac et Prov. Rizal, Montalban Ins. Philippin. (COPELAND, MERRILL).
18. **Phyllachora Pongamiæ** P. Henn., Hedwigia XLVII (1908) p. 255. 4734 — Maculis minutis fuscidulis; stromatibus amphidymis, sparsis rotundatis, planis, atro-subnitentibus, 1-2 mm. diam; loculis immersis, numerosis, ostiolis subverrucoso-prominulis; ascis clavatis,

obtusis, 8-sporis, paraphysatis, 60-70 \approx 8-10; sporidiis oblique monostichis interdum subdistichis, oblongis v. ovoideis, 10-13 \approx 3,5-4.

Hab. in foliis Pongamiæ glabræ, Mindanao, Daraô Ins. Philippin. (COPELAND).

19. *Phyllachora paulensis* Rehm, Ascom. exsicc. n. 1747 (1907), Ann. 4735

Mycol. X (1907) p. 471. — Stromatibus in epiphylllo haud mutato plerumque gregariis, sessilibus, irregulariter orbicularibus v. oblongis, 1-3 mm. diam., atris, convexis; loculis 10-12 innatis, globulosis, minutissime ostiolatis, interdum conoideo-protuberantibus, verrucosis, carbonaceis, intus atris; ascis clavatis 70-80 \approx 15, octosporis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, guttis oleosis repletis, strato tenui mucoso obductis, hyalinis, 10-12 \approx 7-8, distichis; paraphysibus filiformibus 3 μ . cr.

Hab. in foliis Leguminosæ cujusdam, Araraquara prov. Sao Paulo, Brasilia (NOACK).

20. *Phyllachora Gœppertiae* Theiss., Ann. Mycol. VI (1908) p. 535. — 4736

Maculis minutis, subrotundis, læticoloribus, dein exaridis v. brunnescentibus; stromatibus amphigenis, sparse gregariis, 0,5-1 mm. diam., atris, in epiphylllo nitentibus, subconoideis, in hypophyllum magis appplanatis, subopacis, loculis paucis v. solitariis, ostiolo minuto prominulo; ascis cylindræo-clavatis v. plus minus ventricosus, 80-100 \approx 15-20; sporidiis globosis v. ellipsoideis, typice 12-14 \approx 10, usque ad 18 μ . long., hyalinis continuis, intus granulosis.

Hab. in foliis vivis Gœppertiae hirsutæ, *Phæangellæ sociæ* P. Henn. intermixta, in Brasilia. — A *Phyll. socia*, *Ph. opposita* P. Henn. et *Ph. huallagensi* P. Henn. diversa.

21. *Phyllachora vernicosa* Spegazz., Fungi Paulist., Rev. Mus. La 4737

Plata t. XV, p. 26. — Stromatibus innatis determinatis repando-angulosis extus nigris ad epiphyllum præcipue nitidissimis, intus albidis, majusculis 3-10 mm. diam.; loculis stromate intus albido immersis, ad hypophyllum minute ostiolato-pertusis, globosis 120-150 μ . diam.; ascis e fusoidæo subclavulatis, apice obtuse rotundatis, deorsum cuneatis atque in pedicellum breviusculum attenuatis, 60-70 \approx 12-14, paraphysibus filiformibus sat numerosis circumdatis; sporidiis rectis v. oblique mono- v. distichis ellipsoideis 10-12 \approx 5-6, grosse biguttulatis v. diblastibus, hyalinis.

Hab. ad folia viva coriacea arboris ignotæ (Lauraceæ?) cujusdam in Horto botanico Sao Paulo, Brasilia (USTERI). — Var. *papulosa* Spegazz., l. c. — A typo recedit stromatibus minus vernicosus et ad hypophyllum, ob loculos prominulos, minute papu-

losis; ascis 50-60 \times 16 et sporidiis 12-13 \times 8-9 fere ut in typo. — Cum specie.

22. *Phyllachora parvula* Speg., Fungi Paulist., Rev. Mus. La Plata 4738 t. XV, p. 24. — Maculis nullis; stromatibus innatis, amphigenis minutis, 0,5-1,5 mm. diam., angulosis, ad hypophyllum 1-4 bullosis, nigris, subopacis, sparsis v. rarius hinc inde gregariis; loculis astomis, hypophyllis, papuloso-prominulis, globoso-sublenticularibus 120-150 μ . diam., nucleo albo farctis; ascis apice truncato-rotundatis deorsum leniter incrassatulis, basi cuneatis brevissime pedicellatis, 85-100 \times 10-14, plus minusve paraphysatis; sporidiis utrinque acutiuscule rotundatis, rectis, 16-18 \times 5-6, levissimis, bi-guttulatis, hyalinis.

Hab. ad folia viva v. languida Lauraceæ? cujusdam, Morca perto de Sao Paulo, Brasilia (USTERI). — Species *Ph. sociæ* P. Henn. affinis sed certe distincta præcipue defectu macularum.

23. *Phyllachora Litseæ* Koord., Botan. Untersuch. (1907) pag. 181, 4739 fig. 14 (13-15). — Stromatibus, crustaceis, atris, innato-erumpentibus, pulvinatis, sparsis, 0,5-1,5 mm. diam., orbicularibus vel irregularibus, amphigenis; loculis immersis vix ostiolatis; ascis paraphysatis, cylindræis, apice rotundatis, 100-110 \times 10-11, 8-sporis; sporidiis ellipsoideis v. oblongis, utrinque rotundatis, continuis, hyalinis, 12-13 \times 6-8; paraphysibus ascos æquantibus.

Hab. in foliis *Litseæ* polyanthæ prope Penunggalan, Java (KOORDERS).

24. *Phyllachora lepida* Syd., Ann. Mycol. VIII (1910) pag. 38. — 4740 Maculis nullis v. indistinctis flavidis; stromatibus epiphyllis, in hypophyllo etiam perspicuis, sparsis v. hinc inde subgregariis, rotundatis, $\frac{3}{4}$ -1 mm. diam., convexis, atris, nitidis, loculum tantum unicum majusculum ostiolo distincto rotundato minuto præditum includentibus; ascis cylindræo-clavatis vel clavatis, 110-140 \times 14-24, octosporis, paraphysatis; sporidiis oblongis, apice rotundatis, alterum finem versus plerumque leniter attenuatis sed obtusis, hyalinis, continuis, 24-32 \times 7-9.

Hab. in foliis *Litseæ*, Dumaguete in Cuernos Mts. prov. Negros or. in ins. Negros, Philippin. (A. D. E. ELMER). — A *Phyll. Laurinearum* Rac. distincta.

25. *Phyllachora nectandricola* Speg., An. Mus. Nac. Buenos Aires 4741 t. XIX (1909) p. 418. — Stromatibus amphigenis sæpius lenticularibus, prominulis, 200-400 μ . diam., plerumque 1-locularibus, nitidulis; ascis subcylindræis basi breviter crassiusculeque pedi-

cellatis, $100 \approx 15-18$, octosporis, aparaphysatis; sporidiis oblique mono- v. distichis, ellipsoideis utrinque acutis, $15 \approx 7-9$, eguttulatis, hyalinis.

Hab. ad folia Nectandreae ejusdam in silva Robadal, Jujuy Argentina, America austr.

26. **Phyllachora Noackii** Syd., Ann. Mycol. V (1907) p. 359. — Stro- 4742
matibus epiphyllis, sine maculis, sparsis, rotundatis, $\frac{1}{2}$ -1 mm. diam., convexis, atris, parum nitentibus, intus 1-plurilocularibus; ascis cylindraceis, ca. $85 \approx 10$; sporidiis octonis, oblique monostichis, ellipsoideis, continuis, hyalinis, utrinque rotundatis, intus minute granulosi, $12-15 \approx 8-10$.

Hab. in foliis Compositæ ejusdam (Baccharidis? spec.) Prov. Sao Paulo, Sao Francisco dos Campos, Brasilia.

27. **Phyllachora conspicua** Ferd. et Winge, Botanisk Tidsskrift, XXIX 4743
(1908) p. 19, tab. II, fig. 8 — Stromatibus matrici innatis, primo plus minusve orbicularibus, minutis, discretis, mox autem dense aggregatis irregulariterque confluentibus v. crustam conspicuam, usque $1\frac{1}{2}$ cm. diam. formantibus, atris, initio epiphyllis, dein amphigenis, maculis orbicularibus flavis insidentibus easque pene explentibus; loculis globosis, subglobosis v. applanatis, $150-180 \mu$. diam., mesophyllo immersis, ostiolo longo, non prominulo præditis; ascis cito diffluentibus, cylindraceis, cylindraceo-subfusoides v. oblongo-ellipsoideis, apice obtuse rotundatis, postice pedicello brevi et tenui, $80-115 \approx 15-18$; sporidiis octonis, oblique monostichis v. subdistichis (in ascis subellipsoideis fere conglobatis), oblongo-ellipsoideis, utrinque rotundatis, $19-22 \approx 6,5-8$, continuis, hyalinis, oleoso-farctis; paraphysibus filiformibus.

Hab. ad folia viva Jacquiniæ armillaris ad Coral Bay in insula St. Jan Indiae occ. (RAUNKIAER).

28. **Phyllachora Jacquiniæ** Rehm, in Kellerman Journ. of Mycol. 4744
XIV (1908) p. 4. — Stromatibus totum folium occupantibus, gregariis, in utraque pagina conspicuis, in epiphyllis magis prominentibus, in hypophyllo tenuissime valvatim cinctis, semiglobosis v. oblongis, atris, $0,3-0,6$ mm. diam., loculos globulosos $1-3$ minimos, haud perspicue ostiolatos includentibus; ascis cylindraceis, apice rotundatis, $100 \approx 14-18$, 8-sporis; sporidiis ellipsoideis, utrinque rotundatis, glabris, hyalinis, 1-locularibus, strato mucoso tenuissimo obtuctis, $14-15 \approx 8-9$, 1-raro 2-stichis; paraphysibus filiformibus, septatis, $2-3 \mu$. cr.

Hab. ad folia *Jacquinia aurantiacæ*, Jalapa Guatemala (KELLERMAN).

29. *Phyllachora Ardisiæ* P. Henn., Hedwigia XLVII (1908) p. 254. 4745

— Maculis fuscis, rotundatis v. confluentibus effusis, stromatibus epiphyllis, rotundato- v. oblongo-pulvinatis, atris, subnitentibus, loculis immersis numerosis vix ostiolatis; ascis clavatis, obtusis, paraphysatis, 8-sporis, 65-80 \approx 8-10; sporidiis oblongis, obtusis, nubiosis, hyalinis, 8-12 \approx 5-6.

Hab. in foliis *Ardisiæ Candolleanæ*, Luzon Prov. Benguet, Daklanto Kabayan Ins. Philippin. (MERRILL).

30. *Phyllachora ambrosicola* Speg., Ann. Mus. Nac. Buenos Aires 4746

t. XIX (1909) p. 414. — Maculis nullis v. obsoletissimis, palle-scentibus indeterminatis; stromatibus amphigenis innato-lenticularibus 200-300 μ . diam., 1-ocularibus, atris, nitidulis; ascis subcylindraceutis sæpius subtorulosi basi breviter crasseque stipitatis, 80-120 \approx 10-16, non v. parce paraphysatis; sporidiis oblique vel transverse monostichis, utrinque obtusissimis, 12-14 \approx 8-9, medio non v. grosse 1-2-guttulatis, hyalinis.

Hab. ad folia viva *Ambrosiæ tenuifoliæ*, Marmol prope Buenos Aires Argentina Amer. austr. — An *Ph. Ambrosiæ* (B. et C.) Sacc.? Species ad *Physalosporam* notis plurimis vergit.

31. *Phyllachora Macarangæ* P. Henn., Hedwigia XLVII (1908) p. 254. 4747

— Maculis angulato rotundatis v. effusis, fuscis; stromatibus epiphyllis gregariis, rotundato- vel oblongo-angulatis, pulvinatis, atro-subnitentibus; loculis immersis, sobglobosis, ostioliis subpunctiformibus; ascis clavatis, vertice obtusis, 8-sporis, 50-70 \approx 10-14; paraphysibus filiformibus, hyalinis guttulatis, 2 μ . crassis; sporidiis monostichis v. distichis, oblongis, obtusis, hyalinis, 10-15 \approx 5-6.

Hab. in foliis *Macarangæ*, Balut Ins. Philippin. (MERRILL).

32. *Phyllachora Randiæ* Rehm — Syll. XIV p. 667 — subsp. *Acu-* 4748

leatæ Ferd. et Winge, Bot. Tidsskr. XXIX (1908) p. 19; Vidensk. Meddel. fra den naturh. Foren. Kiøbenhavn (1908) p. 142, t. IV, fig. 2. — Stromatibus fere solum epiphyllis, innatis, planiusculis, atris, nitidis, nunc minutis, nunc majoribus, ad 3 mm. diam., pustulas loculigeras $\frac{1}{2}$ - $\frac{3}{4}$ mm. diam., vario secundum magnitudinem stromatis numero (max. 20-30), gerentibus; loculis in pustula singula, 1-2, in epidermide vix mutata insidentibus, superne stratonigerrimo subcuticulari limitatis; ascis cylindraceuto-obovoideis, clavatis, ovoideis, omnino versiformibus, 40-60 \approx 15-20; sporidiis oblongo-ellipsoideis, 12-13 \approx 7-8.

Hab. ad folia viva Randiæ aculeatæ in insula St. Jan Indiæ occidentalis (F. BOERGESEN). — Adsunt pycnidia ad typum *Placosphaeriæ* formata, nunc stromatibus minutis propriis immersa, nunc peritheciis intermixta, sporulas bacillares, subrectas, continuas, hyalinas, $5-8 \approx \frac{1}{2}-\frac{3}{4}$ foventia.

33. **Phyllachora phyllanthophila** P. Henn. — Syll. XVII, p. 834 — 4749
var. *egregia* Rehm, Ascom. exsicc. fasc. 46, n. 1895, Ann. Mycol. (1907) p. 530 et (1910) p. 302. — Distinguitur stromatibus majoribus plerumque oblongis subobtusis, usque ad 4 mm. long., 2-3 mm. latis; loculis innatis 20-35, plus minus prominentibus, poro perspicuo pertusis, monostichis; sporidiis 12-13 \approx 7-9, strato mucoso obvolutis, distichis; ascis clavatis, 50-60 \approx 20.

Hab. in pagina sup. foliorum ? *Phyllanthi*, Sao Leopoldo, Rio Grande do Sul Brasilæ (RICK).

34. **Phyllachora globispora** Speg., An. Mus. Nac. Buenos Aires t. XIX 4750 (1909) p. 418. — Stromatibus amphigenis sed sæpius epiphyllis innatis, lenticularibus, 450-750 μ . diam., atris, nitentibus, loculis 1-3 subglobosis 200-250 μ . diam.; ascis cylindraceis breviter pedicellatis 75-100 \approx 10-12, parce paraphysatis; sporidiis sæpius geminatis, monostichis globosis, 10 μ . d., levibus, grosse 1-guttulatis.

Hab. ad folia Crotonis cujusdam in silvis prope Bompland, Misiones, Argentina America austr. — Specie ab omnibus in *Euphorbiaceis* et præcipue in *Crotonibus* vigentibus longissime recedens.

35. **Phyllachora Blanquillo** Speg., An. Mus. Nac. Buenos Aires t. XIX 4751 (1909) p. 414. — Maculis amphigenis fuscescentibus, irregularibus; stromatibus lenticularibus 150-200 μ . diam., innato-prominulis nitidulis nigris; loculis sæpius in quoque stromate solitariis 120-150 μ . diam.; ascis cylindraceo-fusoideis basi breviter crasseque pedicellatis 60-75 \approx 10-15, parcissime paraphysatis, octosporis; sporidiis ex elliptico subovoideis, oblique v. transverse monostichis, utrinque obtusis 10-14 \approx 7-8, eguttulatis, hyalinis.

Hab. ad folia viva *Excæcariae marginatæ* prope Concepcion del Uruguay Amer. austr. (J. M. HUERGO).

36. **Phyllachora Fici-obscuræ** Koord., Botan. Untersuch., (1907) p. 181. 4752 — Stromatibus crustaceis, atris, discretis, sparsis, pulvinatis, orbicularibus, amphigenis, imprimis epiphyllis, innatis 0,3-0,8 mm. diam.; loculis immersis vix ostiolatis; ascis cylindraceis, paraphysatis, octosporis, apice rotundatis 88-90 \approx 10-12; sporidiis globosis, continuis, hyalinis 10-14 \approx 10-11, uniseriatis.

Hab. in foliis vivis *Fici obscuræ* prope Purworedjo Java (KOORDERS).

37. *Phyllachora Fici-minahassæ* P. Henn., Hedwigia XLVII (1908) 4753 p. 254. — Maculis nullis; stromatibus epiphyllis sparsis v. gregarie confluentibus, atro-carbonaceis, opacis v. subnitentibus angulato-pulvinatis; ascis clavatis, obtusis, 8-sporis, paraphysatis, 45-60 \times 10-16; sporidiis oblongis utrinque obtusis, intus guttulatis, hyalinis, 13-16 \times 5-6,5.

Hab. in foliis *Fici minahassæ*, Balut Island Ins. Philippin. (MERRILL).

38. *Phyllachora Fici-fulvæ* Koord., Botan. Untersuch., (1907) p. 182. 4754 — Stromatibus crustaceis, epiphyllis, atris innato-erumpentibus, 1-1,5 mm. diam., sparsis, circularibus, pulvinatis; ascis cylindraceis 60-80 \times 8-11 apice rotundatis; sporidiis continuis, hyalinis, globosis v. ellipsoideis et utrinque rotundatis, 10-11,5 \times 8-11, uniseriatis.

Hab. in foliis *Fici fulvæ* prope Sapuran Java (KOORDERS).

39. *Phyllachora Fici-albæ* Koord., Botan. Untersuch. (1907) p. 183. 4755 — Stromatibus crustaceis, atris, epiphyllis, innatis, haud erumpentibus, discretis, pulvinatis, suborbicularibus v. irregularibus, 2-4 mm. diam.; loculis numerosis vix ostiolatis; ascis cylindraceis, paraphysatis, 70-75 \times 10-10,5 apice haud incrassatis, octosporis; sporidiis uniseriatis, continuis, hyalinis, globosis v. ellipsoideoglobosis, 8-10 \times 8-9.

Hab. in foliis vivis *Fici albæ* in M. Sendoro prope Kledung Java (KOORDERS).

40. *Phyllachora Devriesei* Koord., Botan. Untersuch. (1907) p. 181, 4756 fig. 14 (7-12). — Stromatibus crustaceis, atris, innatis, 0,8-1,2 mm. diam., sparsis, suborbicularibus, pulvinatis, hypophyllis; loculis immersis, minute ostiolatis; ascis cylindraceis, paraphysatis, 8-sporis, apice rotundatis, 60-80 \times 10-12; sporidiis continuis, hyalinis, subglobosis vel ellipsoideis et utrinque rotundatis, 10-12 \times 7-8,5; paraphysibus filiformibus, 100 \times 3-4, hyalinis.

Hab. in foliis *Fici leucantatomæ* prope Sadang prov. Kedu Java (KOORDERS).

41. *Phyllachora amaniensis* P. Henn., Engl. Jahrb. XXXVIII (1905) 4757 p. 113. — Stromatibus in maculis fuscidulis sparse gregariis, hypophyllis, planis, atris, ostiolato-verrucosis, c. 1-1,5 mm. diam.; loculis immersis, subglobosis v. ovoideis; ascis cylindraceis apice rotundato-obtusis, octosporis, 100-130 \times 7-10; paraphysibus filifor-

mibus, hyalinis c. 2 μ . cr.; sporidiis oblique monostichis, ellipsoideis, utrinque rotundatis, interdum inæquilateralibus, intus granulatis, hyalinis, continuus, 10-14 \times 6-7.

Hab. in foliis Fici spec., Ost-Usambara Africae centr. (ZIMMERMAN).

42. *Phyllachora Merrillii* Ricker, A List Philipp. Fungi in Philipp. Journ. of Science, I, Suppl. IV (1906) pag. 280. — Stromatibus gregariis, confluentibus, epiphyllis, convexis, nigris, nitidis, 6 mm. diam., in maculis flavidis insidentibus; ascis cylindraceo-clavatis, 56-65 \times 14-20, breviter stipitatis, octosporis; sporidiis oblique uniseriatis vel sæpe partim biseriatis vel imbricatis, ellipsoideis, uniseptatis, primum hyalinis, dein brunneolis, 8-12 \times 4-6; paraphysibus minutis, filiformibus.

Hab. in foliis Fici, Mindoro, Bulalacao in ins. Philippinens. (MERRILL).

43. *Phyllachora dendroidea* P. Henn., in Rehm Ascom. Exsicc. fasc. 42 (1908) n. 1787; Ann. Mycol. VI (1908) p. 488. (Nomen nudum).

Hab. in Fico sp. Pará Brasiliæ (C. F. BAKER).

44. *Phyllachora circinata* Syd., Ann. Mycol. VIII (1910) p. 38. — Stromatibus, sine maculis, plerumque epiphyllis, rarius etiam hypophyllis, in greges orbiculares $\frac{1}{2}$ -1 cm. latos amene circinatim dispositis, minutis, rotundatis, 0,5-1 mm. diam., atris, loculis compluribus minutis præditis; ascis clavatis, 42-60 \times 12-15, octosporis; sporidiis irregulariter distichis, oblongis, utrinque obtusis, continuis, hyalinis, 14-18 \times 5-6.

Hab. in foliis Fici sp. (cum foliis magnis glabris integris), Prov. of Cagayan Luzon ins. Philippinenses (H. M. CURRAN).

45. *Phyllachora simplex* Starb., Ascom. Schwed. Chaco-Cordill. Exp., Arkiv f. Bot. Bd. V (1905) p. 14, fig. 10. — Stromatibus minutissimis, non maculiformibus, ad utramque paginam foliis dispersis, solitariis et uni-bilocularibus, rarissime confluentibus, multilocularibus, lenticulariter perithecioides, nitidiusculis, nigris, $\frac{1}{3}$ -1 mm. diam.; pyrenidiis epiphyllis, numerosis, dense sparsis, interdum aggregatis vel nonnullis confertulis, ostiolo pertuso, applanato erumpentibus, circa 150 μ . diam.; sporulis bacillaribus, utrinque acutiusculis, curvatis, interdum genuflexis, 17,7-21,5 \times 1,5-2; ascis octosporis, valde variis, plerumque fusoides, medio latissimis, interdum obovatis vel fere cylindraceo-clavatis, superne in-crassatis, 90-115 \times 19-24 (p. sp.); sporidiis conglobatis, ellipsoideis, utrinque rotundatis vel fere truncatulis, medio interdum incurva-

tis, vel ovato-piriformibus, inferne acutatis vel late ellipsoideis, fere sphærioides, $15,2 \times 10$ vel $19-25 \times 7-8$; paraphysibus hyalinis filiformibus, ascos superantibus.

Hab. in foliis *Coccolobæ*, Asuncion Paraguay (MALME). — Species ascis sporidiisque valde variantibus distincta videtur, ad *Physalosporam* nonnihil accedens, sed a *Phys. Coccolobæ* Rehm plane divergens.

46. *Phyllachora Coccolobæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 4762 (1909) p. 416. — Stromatibus innatis nigris parvis repando-angulosis gregariis utrinque manifestis sed hypophyllis, plurilocularibus, loculis subglobosis $100-120 \mu$. diam.; ascis primo cylindraceutis dein torulosis basi breviter crasseque pedicellatis, $70-80 \times 10-18$, octosporis, paraphysatis; sporidiis ellipsoideis, sæpius transverse monostichis utrinque obtusiusculis $13-14 \times 6$, hyalinis.

Hab. ad folia viva *Coccolobæ* cujusdam in silvis prope Formosa, Argentina America austr.

47. *Phyllachora vilis* Starb., Ascom. Schwed. Chaco-Cordill. Exped., 4763 Arkiv f. Bot. Bd. V (1905) p. 14. — Stromatibus minutissimis, secundum folium filiforme sparsis, interdum confluentibus, elongatis, $0,2-0,3$ mm. longis, vix $0,1$ mm. latis; loculis paucis, vix prominulis, ostiolo pertusis, minimis; ascis cylindraceutis, vel attenuato-fusiformibus, sursum obtuse rotundatis, vix pedicellatis, $50-63 \times 10-12$; sporidiis octonis, inordinatim distichis, semper utrinque acutatis, plerumque clavulatis, inferne longe attenuatis, interdum fusoides, e medio lato mox acutatis, guttulatæ, $18-20 \times 5$; paraphysibus filiformibus, robustis, flexuosis, ascos obvallantibus.

Hab. in foliis *Bulbostylis capillaris*, Minao Geraes, S. Joao del Rey (LINDMAN). — *P. oxysporæ* Starb. affinis.

48. *Phyllachora melanoplaca* (Desm.) Sacc. — Syll. II, p. 607. — 4764 fm. *Veratri* Rehm, Ascom. Exsicc. fasc. 37, n. 1661, Ann. Mycol. IV (1906) p. 407.

Hab. in foliis *Veratri nigri*, prope Konstanzer Hütte, Arlberg Tyrolia, 1770 m. alt.

49. *Phyllachora Pappiana* Bacc., Funghi Eritr., Ann. Bot. IV (1906) 4765 pag. 275. — Stromatibus amphigenis, minutis, subrotundis, atris, diu epidermide tectis; loculis paucis, 200μ . latis; ascis paraphysatis 90×10 ; sporidiis hyalinis, continuis, 22×9 .

Hab. in foliis *Sansevieræ Ehrenbergianæ* in montibus Arbaroba a Mahdet, 2200 m. alt. in *Erythræa* (PAPPI).

50. *Phyllachora cyperina* P. Henn., Fl. du Bas- et Moy.-Congo, in 4766]

Ann. Mus. du Congo v. II, fasc. II (1907) p. 98. — Maculis fuscis oblongis; stromatibus amphigenis, oblongis, atris nitentibus, loculis immersis rotundato-angulatis c. 50-100 μ . cr.; ascis longe fusoides, subacutiusculis, 8-sporis, 60-80 \times 6; sporidiis oblique monostichis vel subdistichis, lanceolato-fusoides, hyalinis, 10-14 \times 3,5-4,5.

Hab. in foliis Cyperaceæ cujusdam, Congo Afric. trop. (VANDERYST).

51. *Phyllachora fimbristylicola* Speg., An. Mus. Nac. Buenos Aires 4767 t. XIX (1909) p. 417. — Stromatibus innatis nigris nitidulis, linearibus v. elliptico-linearibus, 0,5-1 mm. long., 0,2-0,3 mm. latis; loculis confertis 150 μ . diam.; ascis e cylindraceo subfusoides, basi breviter pedicellatis, 55-60 \times 8-10, paraphysatis octosporis; sporidiis distichis subfusoides utrinque acutis 14-20 \times 4-6, hyalinis.

Hab. ad folia culmosque Fimbristylidis capillaris prope Rufino et prope Corrientes, Argentina Amer. austr. — A *Phyll. Fimbristylidis* (B et Br.) Sacc. ascis non clavatis sporidiisque non monostichis nec curvulis atque paullo crassioribus recedens; *Ph. gracillimæ* Speg. etiam peraffinis sed certe distincta.

52. *Phyllachora Sacchari-ægyptiaci* Br. et Cavr., Funghi parass. ess. 4768 n. 416 cum iconibus. — Stromatibus oblongis, seriatim dispositis, confluentibusque, diu epidermide rubefacta tactis; loculis uniseriatis, stromate dense immersis, mutua pressione e globoso irregularibus; ascis cylindraceis, modice pedicellatis, 145-155 \times 12-14, paraphysibus filiformibus, longioribus obvallatis, octosporis; sporidiis oblique monostichis ellipsoideis v. ovoideis, dilute flavescentibus, 19-20 \times 7,5-9,5, episporio levi.

Hab. in foliis Sacchari ægyptiaci in arenosis salsis Siciliae et in horto botanico, Catania (CAVARA).

53. *Phyllachora melicicola* Speg., An. Mus. Nac. Buenos Aires t. XIX 4769 (1909) p. 417. — Stromatibus amphigenis ellipticis, nigris non v. vix prominulis 1-2 mm. long., 0,5-0,8 mm. lat.; loculis numerosis subglobosis 150-180 μ . diam.; ascis linearibus modice pedicellatis, 120-130 \times 10, octosporis, paraphysibus filiformibus commixtis; sporidiis oblique monostichis ellipsoideis, utrinque obtusissime rotundatis, 14-16 \times 8, non v. grosse 1-guttulatis, hyalinis.

Hab. ad folia Melicæ violaceæ prope Jujuy, Argentina America austr.

54. *Phyllachora Eriochloæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 4770 (1909) p. 416. — Stromatibus matrice tota pallescente insidenti-

bus, lenticularibus vel confluyendo linearibus 250-1000 \times 200-250, 1-3-locularibus, loculis totis immersis 100-120 μ . diam.; ascis linearibus basi cuneatis breviterque pedicellatis, 70-80 \times 10-12, parce paraphysatis octosporis; sporidiis oblique monostichis, ellipsoideo-obovatis, 14-15 \times 7, hyalinis.

Hab. ad folia viva *Eriochloæ* annulatæ prope Santiago del Estero Argentina Amer. austr.

55. *Phyllachora boutelouicola* Spegazz., An. Mus. Nac. Buenos Aires 4771 t. XIX (1909) pag. 415. — Stromatibus amphigenis subellipticis opacis, 1-5 mm. long., 1-1,25 mm. lat.; loculis immersis globulosis 120-150 μ . diam., constipatis albo-farctis; ascis subcylindraceutis basi modice attenuato-pedicellatis 80-90 \times 12-15, paraphysatis, octosporis; sporidiis oblique v. transverse monostichis, ovoideis, 12-13 \times 6, eguttulatis hyalinis.

Hab. ad folia viva *Boutelouæ* lophostachyæ prope San Luis, Argentina Amer. austr.

56. *Phyllachora cenchricola* Spegazz., An. Mus. Nac. Buenos Aires 4772 t. XIX (1909) p. 415. — Maculis nullis sed folio omnino pallescente; stromatibus epiphyllis innatis, minutis opacis, sublinearibus, 0,5-1,5 mm. long., 0,25-0,40 mm. lat., non nitentibus; loculis 1-8 in quoque stromate 100-220 μ . diam.; ascis subfusoides basi brevissime crassiusculeque pedicellatis 80-90 \times 12-16, paraphysibus filiformibus densis cinctis, octosporis; sporidiis late ellipsoideis utrinque rotundatis mono- v. distichis, 15 \times 10, eguttulatis.

Hab. ad folia viva *Cenchri* myosuroidis prope Metan, Salta, Argentina Amer. austr.

57. *Phyllachora chloridicola* Spegazz., An. Mus. Nac. Buenos Aires 4773 t. XIX (1909) p. 416. — Stromatibus innatis suborbicularibus 1-2 mm. diam., nitidulis, plurilocularibus, loculis 120-150 μ . diam.; ascis linearibus basi breviter pedicellatis, 85-100 \times 8-10, paraphysatis, octosporis; sporidiis ellipsoideis monostichis plus minusve obtusatis, 10-12 \times 5-7 v. 14-16 \times 7-8, hyalinis.

Hab. ad folia viva *Chloridis* radiatæ, La Rioja, Chlor. distichophyllæ, Cordoba, Argentina Amer. austr.

58. *Phyllachora Urvilleana* Spegazz., An. Mus. Nac. Buenos Aires 4774 t. XIX (1909) p. 419. — Stromatibus innatis hypophyllis fuscis numerosissimis sublinearibus confluentibus, loculis 120-150 μ . diam. ostiolo lato, 20 μ . diam., præditis; ascis obclavatulis basi lenissime crassiusculeque pedicellatis 60-70 \times 7-8, octosporis, parcissime pa-

raphysatis; sporidiis subfusoideis utrinque acutis, 18-20 \times 4, oblique distichis, eguttulatis, hyalinis.

Hab. ad folia *Panici Urvilleani*, Fuente Argentina prope Bahía Blanca, Argentina Amer. austr.

59. *Phyllachora bokensis* P. Henn., in Fl. du Bas- et Moy.-Congo, 4775 v. II, fasc. III (1908) p. 226. — Maculis amphigenis, oblongo-effusis, fuscidulis v. violascentibus; stromatibus amphigenis oblongis striiformiter confluentibus, atro-opacis; loculis subsphæroideis, punctoideo-ostiolatis; ascis clavatis, vertice obtusis, 8-sporis, paraphysatis, 80-110 \times 16-20; sporidiis oblique monostichis vel subdistichis, ellipsoideis v. ovoideis, obtusis, intus granulosi, hyalini, 15-20 \times 9-13.

Hab. in foliis *Panici*, Boko Sainte-Barbe Congo (VANDERYST).

60. *Phyllachora heterospora* P. Henn., Etat indép. du Congo Mis. 4776 sion E. Laurent fasc. IV (1907) p. 362. — Maculis gregariis flavidis v. obsolete; stromatibus amphigenis pulvinato-oblongis sæpe confluentibus, atro-nitentibus; loculis immersis globulosis; ascis fusoides-clavatis, obtusis v. acutiusculis, octosporis, paraphysatis, 50-80 \times 10-15; sporidiis distichis, interdum submonostichis, versiformibus, ellipsoideis, ovoideis v. fusoides, hyalini, 10-18 \times 6-8.

Hab. in foliis *Panici maximi* inter Léopoldville et Kwa-mouth, Africa æquator.

61. *Phyllachora acuminata* Starb., Ascom. Schwed. Chaco-Cordill. 4777 Exp., Arkiv f. Bot. Bd. V (1905) p. 11, fig. 8 a-b. — Stromatibus epidermide nigrificata tectis, epiphyllis vel amphigenis, gregatim sparsis, interdum confluentibus, oblongatis, varie determinatis, applanatis depressis; loculis non prominulis, lenticularibus, fere confluentibus; ascis octosporis, cylindræis, sæpe curvatis, deorsum paullo angustioribus in pedicellum sensim attenuatis, sursum obtusis, fere deciduis, 100-140 \times 9-10; sporidiis recte, interdum oblique monostichis, oviformibus, sursum rotundatis, deorsum cuspidato-acuminatis, hyalini, 14-17,7 \times 5-6,5; paraphysibus hyalini, fere simplicibus, filiformibus, elegantissime flexuosis; stromatibus minoribus pycnidicis ellipticis, $\frac{1}{4}$ -1 mm. longis, dimidio latis; sporulis clavulatis acicularibus, sæpissime curvulis, 12-20 \times 1.

Hab. in foliis vivis *Paspali*, Salta, Argentina. — *P. oxyspora* Starb. affinis; et ab illa et a *P. Cyperi* v. *Donacis* Berl. et Sacc. sporidiis latioribus, cuspidatis differt.

62. *Phyllachora Oplismeni* Syd., Ann. Mycol. V (1907) pag. 339. — 4778 Stromatibus amphigenis, irregulariter distributis, subinde seriatim

dispositis et parum confluentibus, sæpe autem per tota folia æque sparsis, minutis, punctiformibus, rotundatis v. oblongis, ca $\frac{1}{2}$ mm. longis, atris, parum nitentibus, 1- vel pauci-locularibus; ascis cylindraceis, breviter stipitatis, octosporis, $38-45 \times 6-11$; sporidiis oblique monostichis v. subdistichis, continuis, ovatis, utrinque obtusis, hyalinis vel subhyalinis, $9-11 \times 4\frac{1}{2}-6$.

Hab. in foliis *Oplismeni undulatifolii*, Tokyo Japoniæ (N. NAMBU). — Probabiliter *Phyll. Arthraxonis* proxima.

63. *Phyllachora Sorghi* v. Höhn., Fragm. z. Mykol. VII (1909) in 4779 Stzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, p. 844 et in Rehm Ascom. exs. n. 1841, Ann. Mycol. VII (1909) p. 403 (nomen nudum). — Stromatibus amphigenis utrinque visibilibus, sine maculis v. in maculis pallide flavidis rubro-sanguineo marginatis insidentibus, plerumque longitudinaliter seriatis, elongatis, 0,5-1 mm. latis, sæpe confluentibus et usque ad 1-2 cm. longis, carbonaceis, nitidulis, undulato-asperulis; loculis longitudinaliter seriatis, depressis, distincte limitatis, 150-330 μ . long., 100-150 μ . cr.; ostioliis distinctis, rotundatis 40-50 μ . latis; paraphysibus numerosis, late cylindraceis, 6-7 μ . latis, mucosis; ascis clavatis, sessilibus vel breviter stipitatis, octosporis, $90-130 \times 13-20$; sporidiis mono- v. distichis, hyalinis, tenuiter tunicatis, contentu granuloso, unilocularibus, utrinque rotundatis, ellipsoideo-ovoideis, $18-24 \times 12$.

Hab. in foliis *Sorghi vulgaris* in Horto bot. Buitenzorg in ins. Java. — *Phyll. Sacchari* P. Henn. affinis.

64. *Phyllachora paspalicola* P. Henn., in Rehm Ascomyc. Exsicc. 4780 fasc. 42 (1908) n. 1785; Ann. Mycol. VI (1908) p. 488. (Nomen nudum).

Hab. in *Paspalo* sp., Pará Brasilæ (C. F. BAKER).

65. *Phyllachora Eleusines* P. Henn., in Fl. du Bas- et Moy.-Congo, 4781 Ann. Mus. du Congo v. II, fasc. II (1907) p. 98. — Stromatibus amphigenis, sparse gregariis, rotundato- vel oblongo-pulvinatis, atris, nitentibus, c. 0,5-0,7 mm. cr.; loculis immersis, paucis; ascis cylindraceis, obtusis, 8-sporis, $65-80 \times 6-7$; paraphysibus filiformibus c. 1,5 μ . cr.; sporidiis oblique monostichis, ovoideis vel ellipsoideo-fusiformibus, hyalinis, $8-10 \times 6-7$.

Hab. in foliis *Eleusines indicæ*, Kisantu Congo (VANDERYST).

66. *Phyllachora Usteriana* Speg., Fungi Paulist., Rev. Mus. La Plata 4782 t. XV (1908) p. 25, fig. F. — Maculis nullis; stromatibus parenchymate innatis epidermide adnato-tectis, vix prominulis, densius

scule subcircinantibus, pusillis 150-250 μ . diam., numquam confluentibus, loculis in quoque stromate solitariis, subglobosis 80-100 μ . diam., nucleo albo faretis; ascis utrinque attenuatis, apice acutiuscule rotundatis aparaphysatis v. parce pseudoparaphysatis, pedicello brevi suffultis, $60 \approx 12-15$, octosporis; sporidiis fusoides rectis v. leniter inæquilateralibus, utrinque nodulo subgloboso ornatis $25-30 \approx 5-6$, continuis v. obsolete diblastis, hyalinis.

Hab. ad folia coriacea arboris ignotæ cujusdam prope Ipiranga Brasilia (USTERI).

67. *Phyllachora grammica* P. Henn., in Fl. du Bas- et Moy.-Congo, 4783 Ann. Mus. du Congo v. II, fasc. II (1907) pag. 98. — Maculis sparsis rotundato-angulatis, flavis; stromatibus amphigenis nervos sequentibus, linearibus ramosis, atris, subnitentibus; loculis immersis, subsphæroideis; ascis cylindræo-clavatis, obtusis, 8-sporis, $60-70 \approx 8-10$; sporidiis oblique monostichis v. subdistichis, oblongis v. ovoideis, utrinque rotundatis, hyalinis, 1-3-guttulatis, $8-12 \approx 6-7$.

Hab. in foliis indeterminatis, Kisantu Congo Africæ tropic. (VANDERYST).

EURYACHORA Fuck. — Syll. II p. 625, IX p. 1030, XIV p. 674, XVI p. 624, XVII p. 527.

1. *Euryachora duplicata* Rehm, Ann. Mycol. VII (1909) p. 538. — 4784 Stromatibus matrici innatis ab eaque denique denigrata tectis, convexulis, linearibus, ad apices rotundatis, 1-2 cm. longis, 2-4 mm. latis, intus atris, carbonaceis; loculis plurimis globulosis monostiche innatis, papillulis minutissimis conspicuis; ascis cylindræis c. $100 \approx 15$, octosporis; sporidiis ellipsoideis, unicellularibus, guttis duabus magnis oleosis instructis, hyalinis, $15-17 \approx 8-9$, monostichis; paraphysibus filiformibus.

Hab. ad ramulos Serjanicæ, Sao Leopoldo Rio Grande do Sul Brasilicæ (THEISSEN S. J.). — Socia adest *Phyllachora duplex*.

Sect. 3. Phæosporæ.

AUERSWALDIA Sacc. — Syll. II p. 626 et cfr. p. 461, IX p. 1031, XI p. 374, XIV p. 675, XVI p. 625, XVII p. 841.

1. *Auerswaldia Vignæ* P. Henn., Engl. Jahrb. XXXVIII (1905) p. 113. 4785 — Maculis rotundato-angulatis, gregarie sparsis, roseolo-fuscidulis; stromatibus epiphyllis cæspitosis, rotundato-pulvinatis, atro-niten-

tibus, 250-300 μ . diam., 1-paucilocularibus; ascis clavatis vertice obtuse rotundatis, 50-80 \times 8-12, octosporis; paraphysibus filiformibus, hyalinis, c. 2 μ . cr.; sporidiis oblique monostichis v. subdistichis, ovoideis v. subglobosis, primo hyalinis dein roseo-fuscidulis, 7-9 \times 6-8.

Hab. in foliis Vignæ vexillatæ, Amani Ost-Usambara (ZIMMERMAN). — A typo generis stromatibus minutis recedit.

2. **Auerswaldia Dalbergiæ** P. Henn., Engl. Jahrb. XXXVIII (1905) 4786 p. 114. — Maculis flavido-fuscidulis, rotundato-angulatis v. effusis; stromatibus epiphyllis cæspitosis, pulvinato-erumpentibus, atro-nitentibus, punctulatis, c. 180-220 μ ., loculis paucis immersis; ascis clavatis, apice rotundatis, 4- (raro) 8-sporis, paraphysatis, 40-50 \times 7-10; sporidiis oblique monostichis v. subdistichis, ellipsoideis v. subovoideis; intus granulatis, olivaceo-fuscidulis, 8-11 \times 5-6.

Hab. in foliis Dalbergiæ lacteæ, Marangu Kilimandscharo Africæ centr. (G. VOLKENS).

3. **Auerswaldia Derridis** P. Henn., Hedwigia XLVII (1908) p. 255. 4787 — Maculis rotundatis v. effusis brunneis; stromatibus amphidymis gregariis sæpe confluentibus, rotundatis, planis, atris, opacis, loculis immersis, subglobosis; ascis cylindraceis, obtusis, 8-sporis, p. sporif. 30-35 \times 5; sporidiis oblique monostichis, ellipsoideis, flavido-olivascensibus, 5-6 \times 4-4,5.

Hab. in foliis Derridis, Mindoro, Alag River ins. Philippin. (MERRILL).

4. **Auerswaldia Hirtellæ** P. Henn., Hedwigia XLVII (1908) p. 268. 4788 — Maculis flavo-fuscis rotundatis; stromatibus epiphyllis sparsis, erumpenti-superficialibus, pulvinato-subglobosis, rugosis, subcarbonaceis, atro-fuscis, rimosis; loculis immersis; ascis longe clavatis, vertice obtuso-rotundatis, 8-sporis, 100-140 μ . longis, parte spor. 70-100 \times 10-13; sporidiis ellipsoideis v. subfusoides, utrinque obtusis, oblique monostichis v. subdistichis, guttulatis, fuscis, 14-20 \times 8-10; paraphysibus hyalinis.

Hab. in foliis Hirtellæ, Serra do Sincora, Bahia Brasil.

5. **Auerswaldia Copelandi** Syd., Ann. Mycol, IV (1906) p. 343. — 4789 Stromatibus amphigenis, omnino immersis, phyllachoroideis, forma et magnitudine valde ludentibus, 2-15 mm. latis, nervis non limitatis sed eos transverse superantibus, atris, nitidis, carbonaceis; loculis in quoque stromate 1 vel pluribus (usque 20); ascis forma variabilibus, cylindraceis vel clavatis vel saccatis, ca. 70-90 \times 10-28; sporidiis octonis (an semper?), monostichis vel etiam irregulariter

distichis, subglobosis vel late ellipsoideis, continuis, ex hyalino brunneolis, 14-19 \approx 12-15.

Hab. in foliis Caryotæ, in regione Zamboanga, Mindanao, ins. Philippin. (E. B. COPELAND).

6. **Auerswaldia Merrillii** P. Henn., Hedwigia XLVII (1908) p. 255. — 4790

Maculis effusis, fuscidulis; stromatibus amphidymis, sparse gregaris, rotundatis, atro nitentibus, planiusculis, 1-1,5 mm. diam.; loculis immersis subglobulosis; ascis clavatis, obtusis, paraphysatis, 8-sporis, 140-180 \approx 10-13; sporidiis longe fusoides, utrinque subacutis v. subpapillato-hyalinis, guttulatis, subfuliginis, 30-42 \approx 8-10.

Hab. in foliis Freycinetiæ, Mindoro, Mt. Halcon, ins. Philippin. (MERRILL).

SPHÆRODOTHIS Shear, Mycologia v. I (1909) p. 162, *Auerswaldia* subg. *Sphærodothis* Sacc. et Syd. — Syll. XVI, p. 625.

1. **Sphærodothis Neowashingtoniæ** Shear, l. c. p. 162. — Stromatibus 4791

amphigenis, numerosis, sparsis, subellipticis, irregulariter depressis et subcollabentibus, nigris, nitidis, minute punctatis, 3-8 mm. long. sæpe macula flavo-brunnea insidentibus; loculis numerosis, minutis, ovato-oblongis, ostiolis paucis v. nullis umbilicatis; ascis fugacibus globosis v. subglobosis, subsessilibus, octosporis, 100-120 μ . diam.; paraphysibus?; sporidiis oblongo-ellipsoideis, levibus, subcompressis, subsulcatis, initio strato mucoso hyalino obvolutis, dein nudis, et saturate castaneo-brunneis, 56-68 \approx 30-36.

Hab. in foliis Neowashingtoniæ filamentosæ, National City California. — Quoad alias *Auerswaldiæ* species huc ducendæ cfr. Shear l. c.

Sect. 4. *Hyalodidymæ*.

PLOWRIGHTIA Sacc. — Syll. II p. 635, IX p. 1041, XI p. 376, XIV p. 680, XVI p. 628, XVII p. 845.

1. **Plowrightia neo-mexicana** Earle, Bull. of the N. York Bot. Gard. 4792

(1904) p. 291. — Stromatibus primum infossis, mox erumpenti-superficialibus, nigris, rugulosis, tenuibus, crustaceis, orbicularibus v. sæpe ovoideis, 0,5 mm. circ. diam., plerumque confluenti-aggregatis et tunc plus minusve elongatis et usque ad 3 mm. diam.; loculis 6-12 vel ultra in quoque stromate, parvis, confertis, intus albis, superficiem leniter inflantibus, ostiolo obscuro; ascis ellipsoi-

deo-oblongis, breviter pedicellatis, aparaphysatis, circ. $60 \approx 14$; sporidiis distichis, hyalinis, ovoideis, inæqualiter uniseptatis, fortiter constrictis, $20-22 \approx 7-10$, cellula minori plerumque $9 \approx 7$.

Hab. in ramis emortuis Ampelopsidis quinquefoliæ, inter San Ignacio et Las Vegas, New Mexico (T. D. A. COCKE-RELL).

2. **Plowrightia placida** Sydow, Deutsche Zentral-Afrika Exped. (1907-1908) II Bd. p. 99. — Stromatibus epiphyllis, dense sparsis, maculis nullis, sub epidermide ortis, erumpentibus et tandem subsuperficialibus, applanato-globosis, basi coarctatis, plerumque centro tantum matrici insidentibus, atris, 200-300 μ . diam., superficie ob oculos paucos prominulos rugosis, loculis c. 3-8 in quoque stromate; ascis clavatis v. anguste saccatis, apice rotundatis, leniter incrassatis, subsessilibus, $50-70 \approx 14-18$, octosporis, aparaphysatis; sporidiis distichis, fusoideis, medio 1-septatis, non constrictis, $18-30 \approx 5-8$, hyalinis v. subhyalinis.

Hab. in foliis Fici oreodryadum, Rugege-Wald Africa trop. — *Plowrightiæ basirufæ* (B. et C.) v. Höhn. et *Pl. Koordersei* (P. Henn.) v. Höhn. affinis.

3. **Plowrightia Agaves** Maubl., Bull. Soc. Myc. Fr. XXIII (1907) p. 143. — Ita vocanda *Hypocrea Agaves* Maubl. — Syll. XVII, p. 802 — ex ipso auctore.
4. **Plowrightia Williamsoniana** Kellerm., Journ. of Mycol. XII (1906) p. 186. — Stromatibus per epidermidem erumpentibus, globosis vel subpolygoniis vel oblongis, 250-750 μ . alt., 0,5-2 mm. long., concentrice seriatim dispositis, primum maculum definitam suborbicularem v. oblongam efformantibus, sæpe folio partim v. omnino tandem infecto; stromatibus primum fulvis dein fuscis demumque nigris, minute papillatis, non carbonaceis supra conidiferis; loculis numerosis usque ad 40 et ultra $110-125 \approx 90-120$; ascis numerosis oblongis v. subovato-oblongis, inferne attenuatis $60-90 \approx 12-20$, parietibus crassis, octosporis; sporidiis subdistichis, subæqualiter bilocularibus, ovoideo-oblongis, subfulvis v. hyalinis, plerumque $22-24 \approx 5-6$; paraphysibus non visis.

Hab. in foliis vivis v. languidis Agaves americanæ prope urbem Guatemalam America centr. alt. 1200-1800 m. (W. A. KELLERMAN). — Teste cl. Maublanc non satis differt a specie precedente.

5. **Plowrightia Massariæ** (Pass.) Saccardo, Not. Myc. VI, Ann. Myc. 4796 v. III (1905) p. 506, *Epicymatia Massariæ* Pass. — Syll. I, p. 573.

— *Stromatibus pulvinatis* in ostiolo *Massariæ* parasiticis, vix 1 mm. latis, nigris, subcorneis, intus minute pluri-locellatis, loculis excipulo proprio carentibus, 80 μ . diam., pallidis; ascis oblongo-cylindraceis, facile diffluentibus, paraphysibus filiformibus fuscellis copiose obvallatis; sporidiis fusoides-oblongis, utrinque obtuse tenuatis 12-16 \times 6-7,5, rectis, 1-septatis, non constrictis, hyalinis, farctis.

Hab. in ostiis *Massariæ Curreyi* ad ramos *Tiliæ* in viridario publico, Parma Ital. bor. (PASSERINI). — Species inter *Dothideaceas* eximia et vere peculiaris ob parasitismum in *Pyrenomycetis*. Status pycnidicus est *Placosphaeria Massariæ*, quam cfr.

6. **Plowrightia luxurians** Rehm in Theissen Beih. Bot. Centralbl. Bd. 4797 XXVII (1910) Abt. II, p. 392. — *Stromatibus crasse pulvinatis* v. subglobosis, 6-20 mm. diam., intus lignosis, extus atris, papillis obtuse conoideis, asperrimis; peritheciis in strato peripherico polystichis, immersis; ascis cylindraceis, breviter stipitatis, p. sp. 110-130 \times 10-12; sporidiis ellipsoideis, hyalinis, rotundatis, 18-24 \times 8-10, primo diuque continuis, demum 1-septatis.

Hab. ad ramos, Rio Grande do Sul Brasiliæ.

7. **Plowrightia Hieronymi** (Speg.) Spegazz., Fungi Paulist. Rev. Mus. 4798 La Plata t. XV, pag. 27. — Ita vocanda *Dothidella Hieronymi* Spegazz. — Syll. II, p. 627 — ex ipso auctore.

MICROCYCLUS Sacc. — Syll. XVII, p. 844. — Pro *Microcyclus scutula* (B. et C.) Sacc. et Syd., prof. v. Höhnelt novum genus condidit nomine *Coccoidella*, cum gen. *Microcylus* Sacc. ex parte cum *Polystomella* Speg. collidat; rectius tamen servandum est nomen *Microcyclus*, addita nota: *char. emend.*

1. **Microcyclus Derridis** P. Henn., Fl. du Bas- et Moy.-Congo, Ann. 4799 Mus. du Congo, v. II, fasc. II (1907) p. 99. — Maculis flavidulis; stromatibus superficialibus amphigenis plerumque epiphyllis gregariis v. sparsis et nervos sequentibus, disciformibus, atris opacis, rugulosis, c. 0,2-0,3 mm. diam.; loculis immersis paucis; ascis clavatis, obtusis, 8-sporis, 30-55 \times 14, paraphysatis; sporidiis subdistichis oblongis v. subclavatis, hyalinis, medio 1-septatis haud constrictis, 10-15 \times 4-5.

Hab. in foliis *Derridis*, Dembo Congo, Africæ trop.

2. **Microcyclus Koordersii** P. Henn., in Koorders, Botan. Untersuch. 4800 (1907) p. 183, fig. 15(1-6) et in Rehm Ascomyc. exsicc. n. 1615. — *Stromatibus superficialibus hypophyllis, gregarie sparsis, inter-*

dum confluentibus, pulvinato-discoideis, coriaceis, atris, rugulosis, sparse setulosis, 0,3-1 mm. diam.; loculis subimmersis ellipsoideis, porosis, atro-olivaceis; ascis clavatis apice obtuso-rotundatis, 8-sporis, 55-65 \times 10-15, apapophysatis; sporidiis subdistichis, oblonge fusoides v. subclavatis, utrinque rotundatis, interdum subcurvulis, medio 1-septatis, haud constrictis, hyalinis, 22-32 \times 4,5-5,5.

Hab. in foliis vivis *Myricæ germanicæ* (?) in M. Sendoro prope Kledung Java (KOORDERS).

DIPLOCHORA v. Höhn., Sitzb. k. Ak. d. Wiss. Wien, CXV Abt. I (1906) pag. 1201 (Etym. *diploos* duplex et *chora* pro *Phyllachora*). Est genus *Phyllachoræ* affine sed sporidiis connato-binis. Huc du-cenda est *Physalospora dissospora* Feltg., Sacc., Syll. XVII, p. 583.

DOTHIDELLA Speg. — Syll. II p. 627, IX p. 1036, XI p. 375, XIV p. 676, XVI p. 626, XVII p. 846.

1. **Dothidella spinicola** v. Höhn., Ann. Naturh. Hofmus. Wien XX, 4801 (1905) Heft 4, Extr. pag. 3. — Stromate tenui, ruguloso, nigro, pseudoparenchymatico, poris loculorum pertuso; paraphysibus nul-lis; ascis octosporis, elongato-ovoideis crasse tunicatis, 35-40 \times 16; sporidiis hyalinis, utrinque rotundatis, uno latere angustatis, elon-gato-clavatis, bilocularibus, 2-3-guttulatis, 12-13 \times 5.

Hab. in spinis foliorum *Astragali* sp., Lifos Erdschias-Dagh, Anatolia.

2. **Dothidella ? platyasca** Speg., An. Mus. Nac. Buenos Aires t. XIX, 4802 p. 420, cum icon. — Stromatibus epiphyllis densiuscule gregariis hemisphaericis, innato-prominulis 150-250 μ . diam., nitentiusculis 1-locularibus, loculo globuloso 100-120 μ . diam.; ascis compresso-applanatis e fronte obovatis e latere linearibus sessilibus, 42-55 \times 10-20 non v. parce apapophysatis; sporidiis obovatis ad tertium in-ferum 1-septatis, ad septum non v. leniter constrictis, 14-17 \times 6-8, primo hyalinis dein chlorinis.

Hab. ad folia viva *Pithecolobii scalaris* in silvis prope Orán Argentinæ Amer. austr.

3. **Dothidella Stellaris** (Lib.) J. Lind, Ann. mycol. (1905) pag. 428, 4803 *Dothidea Stellaris* Lib., *Euryachora Stellaris* (Lib.) Fuck. — Syll. II, p. 625. — Status ascophorus: ascis 25 \times 10, octosporis; spori-diis inæqualiter bicellularibus, hyalinis, 10 \times 5, cellula inf. 3 \times 3.

Hab. in foliis caulibusque *Stellaris* holosteæ, Viborg Da-niæ, socio pycnidio (*Placosphaeria Stellaris* Sacc.).

4. **Dothidella Hualaniae** Speg., An. Mus. Nac. Buenos Aires t. XIX 4804 (1909) p. 419. — Stromatibus laxe gregariis erumpentibus tuberculiformibus et 2-3 mm. diam., nigris, loculis constipatis, globosis vix papillato-ostiolatis 90-100 μ . diam.; ascis subclavulatis basi breviter crasseque pedicellatis, 70 \approx 16, aparaphysatis v. pseudoparaphysibus parvis immixtis, octosporis; sporidiis distichis ellipsoideo-didymis, utrinque rotundatis 16-18 \approx 8-9, parum infra medium 1-septato-constrictis, hyalinis.

Hab. ad ramulos languidos v. emortuos *Hualaniae* collectoidis, Potrerillos prope Mendoza Argentina America austr.

5. **Dothidella mulinicola** Speg., An. Mus. Nac. Buenos Aires t. XIX 4805 (1909) p. 420. — Stromatibus matricem fere totam ambientibus atque infusantibus, carbonaceis, loculis numerosis constipatis, subglobosis 70-80 μ . diam.; ascis ellipsoideo-subclavatis aparaphysatis, basi brevissime noduloseque pedicellatis, 60 \approx 20, octosporis; sporidiis acicularibus, uniseptatis, non constrictis, hyalinis, 30-40 \approx 4-5.

Hab. ad folia viva *Mulini axilliflori* in alpinis Jujuy, Argentina Amer. aust.

6. **Dothidella Buxi** v. Höhn., Ann. mycol. III (1905) p. 330. — Stromatibus in maculis albidis linea nigra limitatis insidentibus, subcopiosis, $\frac{1}{2}$ - $\frac{9}{10}$ mm. diam., nigris, carbonaceis, pseudoparenchymaticis, irregulariter angulosis, epidermide lacinulata limitatis, in epiphyllis levibus v. rugulosis; loculis numerosis, ovoideis, c. 100 μ . cr.; ascis numerosis, clavatis, octosporis, 80 \approx 6-8; paraphysibus paucis filiformibus; sporidiis distichis, hyalinis, bilocularibus, loculo uno majore, medio non v. vix constrictis, 11-14 \approx 2-3,5, elongatis, utrinque rotundatis.

Hab. in foliis adhuc vivis *Buxi* sempervirentis, prope Evisa Corsica.

7. **Dothidella peruviana** P. Henn., Engl. Jahrb. XL (1907) p. 227. — Stromatibus hypophyllis, innato-superficialibus, sparsis vel gregariis, pulvinato-applanatis, rotundatis vel effusis confluentibusque, atris opacis, rugulosis, ostioliis prominulis obtusis, usque ad 1 cm. longis, 2 mm. latis; loculis immersis, subglobosis c. 150-160 μ . diam.; ascis fusoides v. clavatis, apice crasse tunicatis, obtusiusculis, 8-sporis, obsolete paraphysatis, 80-100 \approx 17-20; sporidiis subdistichis v. conglobatis, longe fusoides, rectis v. curvulis, obtusiusculis v. acutiusculis, medio 1-septatis, hyalinis, 35-50 \approx 5-7.

Hab. in foliis *Baccharidis* sp., *Sandia* Perú (WEBERBAUER).

8. **Dothidella Diplothemii** Syd., Ann. Mycol. V (1907) p. 360. — Ma-

culis nullis; stromatibus epiphyllis, innatis, sparsis vel seriatim ordinatis, minutis et oblongis vel plerumque confluentibus, linearibus et tunc usque $\frac{1}{2}$ -1 cm. longis, atris, carbonaceis, nitidis; loculis paucis vel pluribus, majusculis; ascis oblongo-clavatis, apice rotundatis, basi in pedicellum longiusculum attenuatis, rectis vel curvulis, $50-70 \times 10-14$, octosporis; sporidiis distichis, oblongis, utrinque lenissime attenuatis, medio 1-septatis, non constrictis, hyalinis vel hyalino-chlorinis, $14-16 \times 3-5$; stromatibus conidiophoris similibus, sed plerumque minoribus; conidiis navicularibus, utrinque acutiusculis, 1-cellularibus, intus nubilosis, hyalinis, $14-16 \times 2-2 \frac{1}{2}$.

Hab. in foliis *Diplothemii maritimi*, Rio de Janeiro, Brasilæ.

9. *Dothidella Musæ* v. Höhn., *Fragm. z. Mykol.* V, Sitzb. k. Ak. d. 4809 Wiss. Wien, Bd. CXVI, Abt. I (1907) pag. 130. — Stromatibus hypophyllis, arcte confertis v. hinc inde in crustas 0,5-1,5 mm. latas, rotundatas, irregulariter scabras confluentibus, minutis usque ad 250 μ . latis, nitidulis, nigris, loculo usque ad 180 μ . lato; paraphysibus paucis, crassiusculis filiformibus; ascis clavatis, supra rotundatis, sessilibus, octosporis, $40-60 \times 9-10$; sporidiis distichis, hyalinis, medio non septato-constrictis, apice acutis v. obtusulis, rectis v. curvulis, $14-16 \times 4-4,5$.

Hab. in foliis *Musæ paradisiacæ*, Upolu prope Apia Samoa (RECHINGER).

10. *Dothidella Andropogonis* P. Henn., in *Fl. du Bas- et Moy.-Congo*, 4810 Ann. Mus. du Congo v. II, fasc. II (1907) p. 98. — Stromatibus amphigenis, gregariis, rotundatis v. oblongis, atris, planis, loculis immersis; ascis oblonge clavatis, vertice obtuse rotundatis, 8-sporis $70-90 \times 8-12$, paraphysibus filiformibus, ramosis, c. 0,5 μ . cr.; sporidiis oblique monostichis v. subdistichis, ellipsoideis, hyalinis, medio septatis haud constrictis, $8-12 \times 6-8$.

Hab. in foliis *Andropogonis*, Kisantu Congo Afr. trop. (VANDERYST).

MUNKIELLA Speg. — *Syll.* IX p. 1034, XVI p. 625.

1. *Munkiella melastomata* v. Höhn., *Fragm. z. Mykol.* (1909) VIII, 4811 in Sitzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, pag. 1220. — Stromatibus numerosis gregariis v. per paginam superiorem immutatam foliorum sparsis, rotundatis 0,3-1,5 mm. latis, quandoque paucis adnatis, 1-3-loculigeris, depresso conoideis v. hemisphæricis,

levibus, verruculosus v. radiatim rugosulus, nigro-piceis nitidis, usque ad 200 μ . altis, subcuticularibus; contextu partim parenchymatico; paraphysibus paucis, tenuibus, filiformibus; ascis tenuiter tunicatis, supra rotundatis, basi breviter acutatis, sessilibus, 44-64 \times 12-17, octosporis; sporidiis plerumque distichis, hyalinis, senio fluvidulis, ellipsoideis, basi breviter attenuatis, bilocularibus; loculo superiore majusculo, inferiori 1,5-2 μ . alto; sporidiis 13-16 \times 6,5-8, stratu mucoso tenuissimo vestitis.

Hab. in foliis vivis *Melastomatis malabathrici* prope Buitenzorg in ins. Java. — *Munkiella* ? *pulchellæ* Speg. videtur affinis.

SCIRRHIA Nits. ap. Fuck. — Syll. II p. 634, IX p. 1040, XI p. 376, XIV p. 679.

1. *Scirrha luzonensis* P. Henn., Hedwigia XLVII (1908) p. 256. — 4812
Maculis oblongis vel striiformibus, fuscis; stromatibus epiphyllis sparsis, oblongis, erumpentibus, fusco-atris, 0,5-1 mm. longis, loculis seriatis ostiolatis; ascis clavatis, obtusis, 8-sporis, 60-80 \times 7-9; sporidiis subdistichis, oblonge fusoides, utrinque acutis v. rostellatis, hyalinis, medio 1-septatis, 20-30 \times 3-3,5.

Hab. in foliis *Bambusæ*, Luzon, Prov. Laguna, Los Baños ins. Philipp. (MERRILL).

Sect. 5. Phæodidymæ.

DOTHIDEA Fr. — Syll. II p. 639, IX p. 1043, XI p. 377, XIV p. 680, XVI p. 628, XVII p. 852.

1. *Dothidea Sambuci* (Pers.) Fr. — Syll. II, p. 639 — Var. *Hederæ* 4813
De Not. Micromyc. Dec. I, p. 13, fig. 8 (extr.). — A typo vix differt stromatibus latioribus, atro-nitidis, intus obscurioribus; cetera eadem.

Hab. ad sermenta *Hederæ Helicis* emortua in collibus pr. Taurinum Ital. bor. — Var. *Ilicis* Jacz. in Bull. Soc. Mycol. Fr. XI (1895) p. 173, t. 14, f. 9. — Sporidiis paullo majoribus, nempe 25 \times 7,5. — In foliis ramulisque *Ilicis Aquifolii*, in silvis Vaud Helvetiæ.

2. *Dothidea tumefaciens* Syd., Ann. Mycol. V (1907) pag. 360. — 4814
Stromatibus ramicolis, tumores 1-2 cm. longos et crassos efformantibus, erumpentibus, pulvinatis, 1-2 mm. diam., solitariis vel

aggregatis confluentibusque, rugulosis, atris, opacis; peritheciis numerosis; ascis clavatis, apice rotundatis, breviter pedicellatis, 50-75 \approx 9-15, octosporis; sporidiis distichis, oblongis, medio 1-septatis, primo hyalinis, dein olivaceis vel dilute brunneis, 20-28 \approx 3 $\frac{1}{2}$ -5.

Hab. in ramis *Serjanie* spec. Campinas, Prov. Sao Paulo, Brasilia. — A *Dothidella Serjanie* pluribus notis distincta.

ROUSSOELLA Sacc. — Syll. IX p. 1044.

1. **Roussoella amphigena** Rick, *Boteria* V (1906) p. 44. — Stromate 4815
dothideaceo, erumpente, pulvinato, rugoso, aliquoties rhytismoideo et tunc loculis paucis, atro, orbiculari, amphigeno, gyroso, ostiolis consperso; ascis ventricosis 60-70 \approx 20-25, versus apicem angustatis, vix pedicellatis; sporidiis cylindraceis aut rectangularibus, 25 \approx 10, pluriserialibus, bicellularibus, loculo inferiore vix brevioribus flavidulis, in septa constrictis; paraphysibus conglutinatis.

Hab. in foliis vivis *Lauraceæ* cujusdam, Rio Grande do Sul Brasiliæ. — Videtur potius *Russoella* nec *Dothidea* ob cellulas sporidiorum fere æquales.

PHÆODOTHIS Syd. — Syll. XVII p. 854.

1. **Phæodothis congoënsis** Sacc., *Myc. cong. novi*, *Ann. Myc.* v. IV 4816
(1906) p. 77. — Stromatibus amphigenis, gregariis sed vix seriatis neque confluentibus, immersis, applanatis, ambitu irregulariter orbiculari-oblongis, 1 mm. longis, 0,5 mm. lat. v. minoribus, tenui-carbonaceis, opace nigris, intus paullo dilutioribus, 3-5-locellatis, loculis globosis 130-140 μ . diam., ostiolis punctiformibus vix manifestis; ascis tereti-clavulatis, apice rotundatis, deorsum leviter tenuatis, 50-60 \approx 6,5-7,5 parce filiformi-paraphysatis, octosporis; sporidiis distichis, oblongis, utrinque, præcipue apice, obtuse rotundatis, rectis, medio 1-septatis, levissime constrictis, 14-15 \approx 5-5,2, rectis, olivaceo-fuscis.

Hab. in foliis nondum putridis graminis cujusdam elatioris (habitu *Sacchari* stricti), Kisantu Congo Africæ trop. (J. GILLET). — Certe affinis *Phæodothidi Tricuspidis*, sed satis differt stromatibus non confluentibus nec seriatis, ascis angustioribus etc.

DISCODOTHIS v. Höhn. *Fragm. Mykol.* VII (1909) in *Stzb. k. Ak. d. Wiss. Wien CXVIII*, Abt. I, p. 853 (Etym. *discos* et *Dothis* pro *Dothidea*). — Stromata primum strato conidico cladosporioideo omnino tecta, superficialia, omnino immersa, non secedentia; ostio-

la nulla; loculi depressi, indistincti, confluentes; paraphyses nullæ; asci octospori; sporidia bilocularia, brunnea. — *Mauroidothis* Sacc. et Syd. est certe affinis sed differt stromate arctius adnato, statu conidico nullo, paraphysibus bene evolutis.

1. *Discodothis Filicum* v. Höhn., l. c. p. 854. — Stromate rotundato 4817
v. elongato 0,5-1,5 mm lato, 90-100 μ . crasso, plectenchymatico, demum glabro, opaco, ruguloso nigro, primum conidiis pallide brunneolis, raro unilocularibus, utrinque ex obtuso acutatis, 8-9 \approx 6,5-7, plerumque irregulariter bilocularibus 10-13 \approx 6-7, medio constrictis, utrinque obtusis, in apice hypharum lateraliter parce dispositis tectis; loculis latis depressis, indistincte limitatis, ostiolis nullis sed demum stromate supra irregulariter ascomatiformi aperto; paraphysibus nullis; ascis clavatis, tenuiter tunicatis, supra non incrassatis, octosporis, sessilibus v. vix pedicellatis, 50-80 \approx 10-12; sporidiis distichis, pallide brunneolis, elongatis, bilocularibus, loculo superiori parum latiori, utrinque rotundatis, 12-13 \approx 5-6; hypostromate circ. 30 μ . cr., nigro-rubro-brunneo, indistincte parenchymatico.

Hab. in frondibus Filicis cujusdam in Horto bot. Buitenzorg in ins. Java.

Sect. 6. Hyalophragmiæ.

ROUMEGUERIA (Sacc.) P. Henn. Hedw. XLVII (1908) p. 256, *Homostegia* subg. *Roumegueria* Sacc. — Syll. II, p. 650 — A typo *Homostegice* differt imprimis sporidiis hyalinis (æque pluriseptatis) et habitatione in Phanerogamis. Est fere *Phyllachora* hyalophragmia.

1. *Roumegueria Ichnanthi* P. Henn., Hedwigia XLVII (1908) p. 256. 4818
— Maculis fuscidulis striiformibus; stromatibus amphidymis minutis, rotundatis, striiformiter confluentibus, atris, paucilocularibus; ascis clavatis v. fusoideis, obtusis v. acutiusculis sæpe curvulis, 8-sporis, 45-60 \approx 5-7; sporidiis subdistichis, fusoideis, utrinque subacutis, sæpe curvulis, hyalinis, 4-5-septatis, 15-20 \approx 3 $\frac{1}{2}$ -4.

Hab. in foliis *Ichnanthi* sp., Mindora, Mt. Halcon ins. Philippin. (MERRILL).

2. *Roumegueria graminis* (v. Höh.) Sacc. et Trott., *Homostegia graminis* v. Höhnel, Fragm. z. Mykol. III, in Sitzb. k. Ak. d. Wiss. Wien Bd. CXVI, Abt. I (1907) p. 131. — Stromatibus foliicolis 4819

300 μ . circ. cr., rotundatis v. elongatis, nigris, immersis, in utraque pagina visibilibus, sed in superiore magis evolutis, mono- v. bicellularibus, loculis 100–200 μ . latis; paraphysibus mox mucosis; ascis tenuiter tunicatis, clavatis, sessilibus, octosporis, 60–72 \times 5–6; sporidiis distichis, hyalinis, plerumque sexlocularibus, subfusoides, supra rotundatis, basi longe acutatis, 15–18 \times 3.

Hab. in foliis graminaceæ cujusdam (? *Panicum*), Samoa (RECHINGER). — Quum socia adsit sæpe etiam *Phyllachora graminis*, cum stromatibus simillimis iis *Homostegia*, dubium est an hæc parasitice vivat in stromatibus *Phyllachoræ*.

3. *Roumegueria gangræana* (Fr.) Sacc. in Ann. Myc. X (1912) p. 316, 4820
Phyllachora gangræana (Fr.) Fuck. — Syll. II, p. 604. — *Homostegia gangræana* (Fr.) Wint. Deutsch. Pilze II, p. 917.

Hab. in foliis vivis Poæ bulbosæ fm. viviparæ, Avelino, vere 1904, ubi ipse legi — Stromata nunc maculiformia, nunc valde elongata e totum fere folium occupantia et torquentia, aterima, plano-convexula, intus plurilocellata; loculi globosi, non conferti, 100 μ . diam., ostiolis circularibus, non emergentibus, 20 μ . diam. pertusi. Asci tereti-saccati, apice rotundati, brevissime stipitati, 30–35 \times 11–12, octospori; paraphyses subtortuosæ, hyalinæ, parum distinctæ; sporidia subtristicha, v. oblique monosticha diu ovato-ellipsoidea, 1–2-guttata, 11 \times 4,5–5, denique oblonga, utrinque rotundata sæpius leviter curvula, 2-septata, 14 \times 5,5, semper hyalina.

COCCODIELLA Hara, Botan. Magaz. Tokyo v. XXV (1910) n. 293, pag. 224 (non *Coccoidella* Höhneltiana, ubi sporid. 1-sept.). — Stroma obscurum, disciforme, plano-convexum, subtus centro stipitiformi appendiculatum; perithecia (loculi) immersa, globosa, ostiolata; asci cylindraceuti, octospori, paraphysati; sporidia ellipsoidea, biseptata, hyalina.

1. *Coccodiella Arundinariæ* Hara, l. c. p. 224, cum icone. — Stro- 4821
matibus hypophyllis, raro epiphyllis, gregariis v. sparsis, subcarnosis, disciformibus, subtus stipitiformi appendiculatis, margine libero, 0,8–1,5 mm. (plerumque 1 mm. diam.), superficie minute granulosa, obscure coloratis, intus albis v. griseis, membranaceis; loculis immersis, globosis v. oblongis, ostiolatis 100–150 μ . diam.; ascis cylindraceutis v. clavatis, stipitatis, octosporis, 50–66 \times 7–10; paraphysibus filiformibus 1–2 μ . cr., hyalinis; sporidiis distichis ellipsoideis v. cylindraceutis (raro oblongis), biseptatis, hyalinis, 12–15 \times 4–5.

Hab. in foliis vivis Arundinariæ Simoni, prov. Musashi, Tokyo (MATSUSKA), Sasæ borealis, prov. Mino, Kawauyemura (HARA).

MONTAGNELLA Speg. — Syll. II p. 646, IX p. 1045, XI p. 377, XIV p. 682, XVI p. 629.

1. **Montagnella Berberidis** d'Alm. et da Cam., Bol. Soc. Brot. XXIV 4822 (1908-1909) Extr. pag. 21. — Stromatibus suborbicularibus, atris, solitariis, subsuperficialibus, diu epidermide velatis, $\frac{1}{4}$ - $\frac{1}{2}$ mm. dm.; loculis variis plus minus rotundatis; ascis clavulatis, sursum deorsumque sæpe attenuatis, non v. vix pedicellatis, octosporis, apapophysatis, 50-70 \approx 14-16; sporidiis plerumque tristichis, oblongo-fusoideis, utrinque rotundatis, triseptatis, primo hyalinis, demum fuscis, medio constrictis, 15-18 \approx 5-6.

Hab. in ramis exsiccatis Berberidis vulgaris, in Horto bot. Coimbra Lusitaniæ (A. MOLLER).

2. **Montagnella Opuntiarum** Speg. — Syll. IX, p. 1047 — var. *minor* 4828 Spegazz. An. Mus. Nac. Buenos Aires t. XIX (1909) p. 422. — A typo recedit stromatibus 1-3 mm. diam.; ascis 60-70 \approx 20; sporidiis 28-30 \approx 5-6, 3-septatis, non constrictis.

Hab. ad flagella Rhypsalidis lumbricoidis prope La Plata, Argentina. — Var. *microcarpa* Speg., l. c. p. 422. — Plagulis stromaticis orbicularibus majusculis 2-5 cm. diam. dense granuloso-loculigeris; ascis subfusoideis, 55-60 \approx 8-15, apapophysatis; sporidiis fusoideis utrinque acutatis 15-16 \approx 2,5-3, 3-septatis non constrictis, hyalinis. — Ad truncos vivos Cerei candicantis, Cacheuta prope Mendoza Argentina. — An species distincta?

3. **Montagnella Missionum** Speg., An. Mus. Nac. Buenos Aires t. XIX 4824 (1909) p. 422. — Stromatibus subglobosis 2-3 mm. diam., gemmas v. ramulos infectantibus, nigris, verruculosis; peritheciis in stromate superficialibus, dense constipatis subglobosis 180-250 μ . diam.; ascis subcylindraceutis brevissimeque stipitatis, 100-120 \approx 16-25, parce paraphysatis; sporidiis sæpius distichis, subcylindraceutis 38-40 \approx 9-10, 1-5-septatis, primo hyalinis dein olivaceis, submajusculis.

Hab. ad ramulos vivos Mayteni ligustrini? in silvis pr. Bompland Argentina, America austr. (P. JORGESEN).

4. **Montagnella mendozana** Speg., An. Mus. Nac. Buenos Aires t. XIX 4825 (1909) p. 421, cum icon. — Stromatibus endogenis per ramulos incrassatos fissos erumpentibus nigris, subcarbonaceis dense gra-

nuloso-loculigeris, 1-5 cm. long., loculis hemisphaericis 120-180 μ . diam. eximie papillato-ostiolatis albo-farctis; ascis subclavatis breviter crasseque pedicellatis 100-110 \times 18-20, octosporis, paraphysatis; sporidiis distichis cylindraceis, 40 \times 8-9, 3-septatis, ad septa non constrictis, primo hyalinis serius fumosis.

Hab. ad ramos vivos *Artemisiæ mendozanæ* in preandinis Cacheuta et Potrerillos prope Mendoza, Argentina Amer. austr.

RHOPOGRAPHELLA P. Henn. ut subg., Fung. Amaz. II, pag. 257 (1904) et Syll. XVII, p. 858. — A typo *Rhopographi* distinguitur sporidiis hyalinis v. subhyalinis et subinde appendiculatis. — Huc ducendæ species *Rhop. Gaduæ* (P. Henn.) Sacc. et Trott. et *Rhop. Gynerii* (P. Henn.) Sacc. et Trott.

1. **Rhopographella Taquaræ** (Rehm) Sacc. et Trott., *Rhopographus Ta-* 4826
quaræ Rehm, Ann. Mycol. VI (1908) pag. 318. — Stromatibus parallele innatis, culmum ampliatus ambientibus et nigrificantibus, demum striiformiter perforantibus, itaque rimosis, extus nigris, 1-2 cm. longis, intus flavo-virentibus, ostiolis globosis, in rimis culmi seriatis; loculis immersis, monostichis, globosis, 0,15 mm.; ascis cylindraceo-clavatis, apice rotundatis, ca. 150 \times 15-18, octosporis; sporidiis oblongo-fusoideis, utrinque subobtusis, haud appendiculatis, 5-7-septatis, ad septa non constrictis, plerumque rectis, hyalinis, 30-35 \times 6-7, distichis; paraphysibus filiformibus, hyalinis, 2 μ . crassis.

Hab. in culmo *Gaduæ Taquaræ*, Sao Leopoldo, Rio Grande do Sul Brasiliæ (Rick S. J.). — Affinis *Rhopographellæ Gaduæ* sed satis distincta.

Sect. 7. Phæophragmiæ.

HOMOSTEGIA Fuck. — Syll. II p. 649, IX p. 1049, XIV p. 683, XVI p. 631, XVII p. 857.

1. **Homostegia Piggotii** (B. et Br.) Karst. — Syll. II, pag. 649. — 4827
var. *Peltigeræ* Rehm, Ann. Mycol. VI (1908) pag. 524. — Ascis cylindraceis c. 100-120 \times 18-20, octosporis; sporidiis 4-locularibus, 1 v. 2 cellulis mediis longitudinaliter divis, flavo-brunneis, 21-25 \times 10-12, monostichis.

Hab. in *Peltigera canina* prope Hohenaschau Bavaria (SCHNABL), Scheibenhof prope Kreims Austriae inf. (LOJKA).

2. *Homostegia andina* Speg., An. Mus. Nac. Buenos Aires t. XIX 4828 (1909) p. 423. — Stromatibus minutis erumpentibus, 0,5-1 mm. long., 0,2-0,4 mm. diam., pauci-ocularibus carbonaceis, loculis constipatis 100-150 μ . diam.; ascis subcylindraceis aparthysatis, basi brevissime noduloseque pedicellatis 70-80 \times 16, octosporis; sporidiis elongato-didymis, distichis, utrinque obtusiusculis 18-22 \times 7-8, primo 1- serius 3-septatis, 2-4 grosse guttulatis, olivaceis.

Hab. ad ramulos *Verbenæ ephedroidis* in præandinis Ca-cheuta, prope Mendoza Argentina Amer. austr.

3. *Homostegia fusispora* Syd., Ann. Mycol. VIII (1910) pag. 39. — 4829 Maculis amphigenis, minutis, flavidis, 2-4 mm. diam., indeterminatis; stromatibus epiphyllis, immersis, solitariis v. paucis aggregatis, minutis, parum prominulis, ellipticis, atris, intus 1- v. pauci-ocularibus, $\frac{1}{3}$ - $\frac{1}{2}$ mm. long.; ascis fusiformibus v. clavatis, 60-100 \times 12-18, octosporis; sporidiis fusoideis, utrinque acutiusculis, distichis, 6-7-septatis, non constrictis, primo hyalinis, tandem brunneolis, 30-40 \times 6-7.

Hab. in foliis vivis *Bambusæ*, Dumaguete in Cuernos Mts. prov. Negros or. ins. Philippinensium (A. D. E. ELMER).

Sect. 8. Hyalodictyæ.

CURREYELLA (Sacc.) Lind. in Engl. Pflanzenf. I, p. 379. *Curreya* subg. *Curreyella* Sacc. Syll. XI, p. 379.

1. *Curreyella Aucupariæ* R. L. Smith, Trans. Brit. Mycol. Soc. 1907 4830 v. III (1908) p. 43, tab. I, fig. 9. — Stromatibus cortici interiori adnatis, erumpentibus, fusco-nigris magnitudine ludibundis, hemisphæricis v. elongatis, c. 1 mm. long.; loculis seu peritheciis paucis; ascis clavatis usque ad 200 \times 12; sporidiis clavato-fusoideis, 5-6-septatis parceque muriformibus, ad septa submedia leviter constrictis, 30-40 \times 8-10, hyalinis.

Hab. ad ramos *Piri Aucupariæ*, Dunkeld Scotiæ (MAC INTOSH). — Loculi indicatur 30-40 μ . diam., sed probabiliter longum est 300-400.

2. *Curreyella palmincola* (Rehm.) Sacc. et Trott, *Curreya palmincola* 4831 Rehm, Ann. Mycol. V (1907) p. 530. — Stromatibus innatis, oblongo-ellipsoideis, 2-12 mm. longis, 2-6 mm. latis, in utraque folii

pagina conspicuis, planis, purpureis, flavidulo-marginatis, tenuibus, contextu membranaceo, parenchymatico, fusco, glabris; loculis per multis ca. 100 μ . latis confertis, apice globoso-subprominentibus, siccis ruguloso-collapsis; ascis subglobosis, crasse tunicatis, ca. 30 \times 25, octosporis; sporidiis oblongis, utrinque rotundatis, rectis, transverse 3-septatis, cellula secunda longitudinaliter 1-septata, hyalinis, 12 \times 4; paraphysibus ramosis, ascos circumeuntibus.

Hab. in folio Palmæ, Sao Paulo, Brasilia (USTERI). — *Curreya bambusicolæ* proxima, sed probe distincta.

3. *Curreyella Rehmii* (Schnabl) A. L. Smith., l. c. p. 43 = *Curreya* 4832 *Rehmii* Schnabl — Syll. XI, p. 379.

Sect. 9. Scolecosporæ.

OPHIODOTHIS Sacc. — Syll. II p. 552, IX p. 1051, XIV p. 685, XVI p. 632, XVII p. 859.

1. *Ophiodothis Arundinellæ* P. Henn., Engl. Jahrb. XXXVII (1905) 4833 p. 162. — Stromatibus in axillis vaginarum inclusis, corniformibus cylindraceis, obtusis, atris, c. 5 mm. long., 2 mm. cr. verrucoso-rugulosis; loculis dense stipatis, ovoideo-ellipsoideis; ascis longe cylindraceis apice rotundato-capitellatis, octosporis, 120-150 \times 4-6; sporidiis parallelis, filiformibus, pluriguttulatis v. septulatis, hyalinis, 1,5-2 μ . latis.

Hab. ad culmos *Arundinellæ* anomalæ, Umajiura Tosa Japonia (YOSHYNAGA). — *O. Paspali* P. Henn. affinis sed stromatibus brevioribus, ascis longioribus, sporidiis latioribus diversa.

2. *Ophiodothis Schillingii* P. Henn., Engl. Jahrb. XXXVIII (1905) 4834 pag. 114. — Stromatibus cylindraceo-typhoideis, apice attenuatis, subulatis, spicas omnino destruentibus deformantibusque, crusta atra vestitis, 6-7 cm. long., 3-4 mm. cr.; loculis gregariis immersis, globulosis, c. 140-170 μ . diam., punctoideo-ostiolatis; ascis cylindraceis, apice obtuso-rotundatis, octosporis, 100-130 \times 4-5; sporidiis parallelis, filiformibus, pluriguttulatis v. septulatis, hyalinis, 1-1,5 μ . cr.

Hab. in inflorescentiis *Rottbœlliae* sp., Sokode Togo Africae centr. (SCHILLING).

Incertæ sedis.

MYXODISCUS v. Höhn., Fragm. z. Mykol. II, in Sitzb. k. Ak. d. Wiss. Wien CXV (1906) Abt. I, p. 23.

1. **Myxodiscus confluens** (Schwein.) v. Höhn., l. c. pag. 23, *Xyloma* 4885 *confluens* Fr., *Rhytisma confluens* Fr. — Syll. VIII, p. 760 — *Dothichiza ? Eupatorii* C. Mass. — Syll. X, p. 433 — *Leptostroma Eupatorii* Allesch.

Fam. 7. Hypocreaceæ ().**Sect. 1. Hyalosporæ.*

HYPONECTRIA Sacc. — Syll. II p. 455, XI p. 354, XIV p. 621, XVI p. 559.

1. **Hyponectria Volkartiana** Rehm, Ann. Mycol. V (1907) p. 543. — 4886
Peritheciis in maculis fuscis 1 cm. long., 0,2-0,4 cm. lat., præcipue corticis interioris caulium gregarie innatis per peridermium elatum erumpentibus, denique sessilibus, globosis, vix papillulatis, fusco-nigrescentibus, pruina aurea obductis glabris, contextu tenuiter parenchymatico, fusco-rubro, 0,3 mm. diam.; ascis cylindraceis vel subfusiformibus, apice rotundatis, 120-130 × 12-15, octosporis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, guttulis oleosis repletis, strato mucoso 2 µ. lat., obductis, hyalinis, 18-20 × 9-10, 1-stichis; paraphysibus filiformibus, septatis, 3 µ. cr.
Hab. ad caules siccos *Phacæ* frigidæ, Fürstenalp, Graubünden Helvetiæ, 1900 m. alt. (Dr. VOLKART). — *Hyp. Penziana* proxima.
2. **Hyponectria Rhododendri** Rehm, Ann. Mycol. V (1907) p. 544. — 4887
Peritheciis hypophyllis, dispersis, innatis, in folii superficie haud mutata, semiglobosis, elatis, ostiolo minutissimo nigrescente promi-

(*) De non paucis generibus et speciebus Hypocreacearum cfr. observationes et emendationes cl. v. Höhnel in ejus variis contributionibus nuperioribus (in Sitzungsber. k. Akad. Wien, in Ann. Mycol. etc.) nec non cl. Seaver in « Mycologia » 1910.

nentibus, globosis, contextu parenchymatico flavo-fuscidulo tenui, glabris, mollibus, 200 μ . diam.; ascis tenerrimis, clavatis, apice rotundatis, in stipitem sensim elongatis, 150-160 \approx 20-25, octosporis; sporidiis fusiformibus, plerumque utrinque acutatis, interdum apice superiore rotundatis, rectis, 1-cellularibus, guttas oleosas magnas 1-3 continentibus, ceterum guttulis minutissimis repletis, strato tenui gelatinoso obductis, flavido-roseolis, 40 \approx 7-10, distichis; paraphysibus tenerrimis septatis, guttulis oleosis repletis, subramosis, 2 μ . cr., hyalinis.

Hab. ad folium putrescens *Rhododendri ferruginei* in alpe Alpein, Stubai, Tirolæ 2000 m. (REHM). — Primo obtutum cum *Lophodermio Rhododendri* fere commutanda.

3. *Hyponectria dakotensis* Sear, Mycologia I (1909) p. 20, tab. II, 4838 fig. 1-4. — Peritheciis sparsis v. subinde 2 v. pluribus congestis, demum plus minus erumpentibus, initio epidermide albida velatis, ostiolo disciformi erumpente, centro distincte pertuso præditis, præsertim circa ostiolum pilosulis, 200 μ . diam.; ascis clavatis, octosporis, 30-45 \approx 5; sporidiis 2-seriatis vel deorsum 1-seriatis, fusoides, vulgo crasse 2-guttatis et utrinque minute 1-2-guttulatis, 10 \approx 2-2,5; paraphysibus delicatis.

Hab. in caulibus *Ambrosiæ trifidæ*?, Forgo N. Dakota Amer. bor.

PHYSALOSPORINA Woronichin, Ann. Mycol. IX (1911) pag. 217 (Etym. a *Physalospora*). — Perithecia immersa stromate phyllogeno, tenui obsoleto, non carnosio immersa, globulosa, ostiolo brevi erumpente, contextu perithecii aurantio, roseo, ochraceo v. ostioli fuscescente molliusculo. Asci elongati, octospori, typice paraphysati. Sporidia ellipsoideo-oblonga, continua, hyalina. Pycnidia: *Rhodostica* Woronichin (h. e. *Polystigmata* brevispora). A *Polystigmatum* typico differt stromate obsoleto, tenui, laxo, non carnosio, protuberante; a *Physalospora* peritheciis mollibus, læticoloribus.

1. *Physalosporina aurantia* (Ell. et Ev.) Sacc. *Physalospora aurantia* 4839 Ell. et Ev. North Amer. Pyren. p. 304, t. XXVII. — Peritheciis gregariis, parenchymate immersis, suboblongis 175-200 \approx 130-150, contextu amœne aurantiaco; ostiolis obtusis erumpentibus epidermide levissime pustulata et atrata subtectis; ascis clavato-cylindræis, 100-110 \approx 12-15, paraphysibus crassiusculis, septatis, hyalinis obvallatis, octosporis; sporidiis monostichis v. subdistichis

oblongo-ellipsoideis, utrinque rotundatis, 12-22 \times 8-9, hyalinis, levibus, intus granulosus.

Hab. in foliis languidis *Astragali pectinati* Sand Coulee, Montana (ANDERSON). — *Physalospora Astragali* (Lasch) Sacc. peritheciis contextu atro-fuligineo distingui videtur.

2. **Physalosporina Caraganæ** Woronichin in Ann. Mycol. (1911) v. VII, 4840
Physalospora Caraganæ Woron. in Bull. Jard. imp. bot. St. Pétersb. XI (1911) p. 12. — Stromatibus amphigenis, griseo-roseis; peritheciis gregariis globosis v. oblongis, 290-420 \times 240-325, stromate immersis, vix apice eminentibus, contextu parenchymatico, roseo-ochraceo ad apicem peritheciis brunneo; ascis cylindraneo-fusoideis, octosporis, 87-105 \times 14-16, paraphysibus filiformibus, hyalinis; sporidiis ellipsoideis, hyalinis monostichis, 12-14 \times 7-8.

Hab. in foliis languidis *Caraganæ fruticis* pr. Sosnovka, Samara Rossie (E. ISPOLATOV). — Status pycn.: *Rhodostieta Caraganæ* Woron. quam cfr. — *Physalospora Astragali* peritheciis contextu atro-fuligineo distinguitur.

3. **Physalosporina obscura** (Juel) Woronich., l. c. — Ita vocandum 4841
Polystigma obscurum Juel — Syll. XIV, p. 625.
4. **Physalosporina megastoma** (Peck) Woronich., l. c. — Ita vocanda 4842
Physalospora megastoma (Peck) Sacc. — Syll. I, p. 437.
5. **Physalosporina australiensis** Sacc. — Ita vocandum *Polystigma* 4843
australiense Sacc. — Syll. IX, p. 945.
6. **Physalosporina astragalina** (Rehm) Woronich. l. c. — Ita vocanda 4844
Læstadia astragalina Rehm — Syll. XIV, p. 516.

NECTRIELLA Sacc. — Syll. II p. 448, IX p. 941, XI p. 354, XIV p. 621, XVI p. 559, XVII p. 778.

1. **Nectriella bacillispora** Trav. et Spessa, Bol. Soc. Brot. XXV (1910) 4845 p. 172 t. I, f. 5. — Peritheciis plerumque 4-6-cæspitosis, per epidermidem laceratam erumpentibus, globoso-depressis, 150-200 μ . diam, rubro-aurantiacis, circa ostiolum vix perspicuum umbilicatis; excipulo indistincte pseudo parenchymatico, aurantiaco-flavido; ascis copiosis, anguste cylindraneo-clavatis vel subfusoideis, deorsum attenuato-pedicellatis, apice obtusis, 30-35 \times 5-6 parce paraphysatis; sporidiis cylindraneo-bacillaribus, utrinque obtusis, biguttulatis, hyalinis, 5-6 \times 1-1 $\frac{1}{2}$ distichis.

Hab. in foliis siccis *Fourcroyæ giganteæ* in horto botanico conimbricensi Lusit. (A. MOLLER). — *Nectriellæ miltinæ* valde

affinis; differt præcipue ascis minoribus, sporidiis minutis, perfecte bacillaribus et biguttulatis.

2. *Nectriella musicola* (Speg.) Sacc. et Trott., *Notarisiella musicola* 4846
Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) pag. 404. — Peritheciis udis globulosis siccis subcorrugato-cupulatis 120-150 μ . diam., carnosulo-membranaceis, contextu roseo-subhyalino, minute albo-puberulis superne subglabratis; ascis obclavatulis, basi breviter cuneato-pedicellatis 60-65 \times 10-12, octosporis, aparaphysatis; sporidiis ellipsoideis, oblique distichis, 10-13 \times 5-6, primo subdiblastis dein grosse 1-guttulatis, levibus hyalinis.

Hab. ad caudices semicombustos putrescentesque Musæ paradisiacæ prope Tucumán, Argentina America aust. — A *Nectria Musæ* Pat. sporidiis semper ellipsoideis 1-ocularibus distincta.

RHYNCHONECTRIA v. Höhnelt (1903) — Syll. XVII p. 798 = *Eleutherosphaera* Grove, Journ. of Bot. (1907) p. 171.

1. *Rhynchonectria longispora* (Ph. et Plowr.) v. Höhn. l. c. — Ita 4847
vocanda est *Eleutherosphæra longispora* (Ph. et Plowr.) Grove — Syll. IX, p. 942.

THELOCARPON Nyl. — Syll. IX p. 946.

1. *Thelocarpon conoideum* von Höhnelt, Oest. bot. Zeitschr. Jahrg. 4848
1906, n. 11-12, Extr. p. 12. — Peritheciis viridi-flavidis, ovoideo-conoideis, 200-300 μ . diam., 350-400 μ . alt., basi leniter immersis; paraphysibus numerosissimis, 0,5 μ . cr.; ascis numerosis, longe pedunculatis, clavatis, supra cylindraceo-angustatis et apice rotundatis circ. 200 \times 33; sporidiis numerosissimis, elongato-cylindraceis, utrinque rotundatis, unilocularibus, 6-11 \times 2,5-3.

Hab. ad terram in silvis prope Allenfsteig Austriæ inf. — *Thelocarpon conoidello* Nyl. affine.

BYSSONECTRIA Karst. — Syll. II p. 456, IV p. 942, XI p. 354, XIV p. 623, XVI p. 560.

1. *Byssonectria cupulata* Theiss., Ann. Mycol. (1910) p. 458, c. ic. 4849
— Peritheciis dispersis v. dense gregariis, minutis, globosis, flavo-aurantiis, typice bysso albido compactiusculo cupulam hemisphæricam efformanti singulis insidentibus, 170-240 μ . diam.; ascis cylindraceis, apice plerumque paullo incrassatis, p. sp. 38-48 \times 5 (apice usque ad 8 μ . cr.), octosporis, supra rotundatis, brevissime pedicellatis; sporidiis hyalinis, levibus, distichis v. oblique mono-

stichis, septo delicato, non constrictis, ellipsoideis, $6,5 \approx 3$; sporulis hyalinis, continuis, ellipsoideis, biguttulatis, rotundatis, $5-6 \approx 3$.

Hab. in stromate Sphaeriacearum et Valsacearum, Sao Leopoldo, Rio Grande do Sul Brasilia (J. Rick).

PECKIELLA Sacc. — Syll. II p. 472, IX p. 944, XVI p. 560, XVII p. 780.

1. **Peckiella hymenioides** Peck, Bull. Torr. Bot. Club XXXIV (1907) 4850 pag 102. — Subiculo tenui, adpresse tomentoso, albo, hymenium hospitis tegente; peritheciis subglobosis, a subiculo plus minusve celatis, e pallide succineis atro-brunneis; ascis angustis, cylindraceis; 8-sporis, $60-80 \approx 5-6$; sporis simplicibus, subfusiformibus, utrinque acutis v. acuminatis, $12-15 \approx 4-5$.

Hab. in hymenio Lactarii uvidi Fr., Newfane Vermont (Miss G. S. BURLINGHAM). — *Peckiellæ hymenii* Peck, affinis sed ascis, sporis, subiculo diversa.

2. **Peckiella hymenii** Peck, N. York State Mus. Bull. n. 116 (1907) 4851 p. 28. — Subiculo albo, supra hymenium et lamellas oblitteratas plus minusve effuso; peritheciis minutis, globosis, in subiculo subimmersis, numerosis, pallide melleis dein ætate obscurioribus; ascis linearibus $240-320 \approx 7-10$; sporidiis monostichis, fusoides utrinque acutatis, hyalinis, $40-45 \approx 6,5-7$, cruciatis massulas albas irregulares formantibus.

Hab. in hymenio Lactarii vellerei, Wading River, Suffolk Co. Amer. bor.

3. **Peckiella Camphorati** (Peck) Seaver in Mycologia II (1910), tabula 4852 XXI, fig. 6, *Hypomyces Camphorati* Peck, New York State Mus. Bull. 1906 n. 105, p. 23. — Subiculo tenui, effuso, hymenium oblitterante, flavo; peritheciis numerosis, minutis, subiculo immersis, ostiolo emergente brunneo; ascis longissimis, $120-150 \mu$. long. (parte sporif.) octosporis; sporidiis monostichis, oblongo-fusoides, continuis, acutis v. interdum utrinque cuspidatis, $12-15 \approx 4-5$.

Hab. in hymenio Lactarii camphorati, Port Jefferson, Suffolk Co. Amer. bor.

4. **Peckiella lateritia** (Fries) R. Maire, Not. Myc., Ann. Myc. v. IV 4853 (1906) p. 331. — Ita vocanda *Sphaeria lateritia* Fries seu *Hypomyces lateritius* (Fr.) Tul. — Syll. II, pag. 468 — a quo, teste Maire l. c., non differunt *Sphaeria deformans* Lagg. — Syll. II, pag. 475 [sub *Hypomyc.*] et *Hypomyces Vuilleminianus* Maire — Syll. XVI, p. 560 [sub *Peckiella*].

SELINIA Karst. — Syll. II p. 457, IX p. 943.

1. **Selinia subtropica** Spegazz., An. Mus. Nac. Buenos Aires t. XIX 4854 (1909) p. 404. — Stromate non prominulo matrice dealbata innato, albescente; peritheciis paucis (1-3) stromate infossis, ostiolo fuligineo breviter exerto manifestis, globosis, 0,75-2 mm. diam.; ascis subellipsoideis pedicellatis, parte spor. 150-180 \approx 50-90, ped. 50-80 \approx 10-15, paraphysatis; sporidiis 2-3-stichis 60 \approx 28, crassiuscule tunicatis, levibus, e hyalino subchlorinis.

Hab. in fimo vaccino putrescente in collibus prope Salba Argentina Amer. austr. — *S. pulchræ* (Wint.) Sacc. peraffinis, sporidiis tamen apice non acutatis stromateque pallido non verrucoso recedens.

POLYSTIGMA Pers. — Syll. II p. 458, IX p. 945, XIV p. 625, XVII p. 780.

1. **Polystigma Adenostomatis** Farl. in Ell. et Dearn. Fungi Columb. 4855 (1905) n. 2049. — Peritheciis amphigenis, congregatis, ovoideis, 280 \approx 140, folii substantiæ decoloratæ purpurascenti immersis; contextu aurantiaco; ascis octosporis, elongato-ellipsoideis, 56 \approx 16; sporidiis ovoideis, hyalinis, 14 \approx 5-6; paraphysibus simplicibus, lineari-clavatis, 3-4 μ . cr. aurantiacis.

Hab. in foliis vivis *Adenostomatis fasciculati*, S. Matio, California Americæ borealis (C. H. THOMPSON).

2. **Polystigma Haræanum** Sacc., in Ann. Mycol. X (1912) p. 311. — 4856 Stromatibus subcutaneis, hinc inde dense gregariis, minutis, intus et extus amœne roseis, longitudinaliter oblongis v. irregularibus 0,5-1 mm. long., 0,5 mm. latis, epidermide tumidula levi velatis; oculis copiosis, immersis, globosis, minutissimis, 50-60 μ . diam. ostiolis non v. vix visibilibus, pariete minute et tenerrime celluloso, cellulis 4-5 μ . diam.; ascis fusoides, subsessilibus, apice obtusis lumineque bifoveolato præditis, 28-32 \approx 5,5-6, octosporis, pseudoparaphysibus (ascis immaturis) tereti-fusoidis obvallatis; sporidiis oblique monostichis, oblongo-fusoides, utrinque obtusulis, sæpius 4-guttulatis, 7-8 \approx 2,5, hyalinis.

Hab. in culmis emortuis *Phyllostachydis* sp. in Japonia. Legit et communicavit A. KANESUKE HARA, 1911.

Sect. 2. Phæosporæ.

SPHÆRODERMA Fuck. — Syll. II p. 459, IX p. 949, XI p. 355, XIV p. 627, XVI p. 562, XVII p. 781 (*).

1. **Sphaeroderma microsporum** von Höhnelt, Ann. Mycol. III (1905) 4857 p. 327. — Peritheciis superficialibus v. semiimmersis, sparsis, c. 200 μ . cr., sphaeroideo-piriformibus, collo 100 μ . cr., nigris; contextu molli, subtenui, obscure brunneo, distincte parenchymatico; ascis numerosissimis, cylindraceis, 60 \times 5-6, basi longe attenuatis acutatis, octosporis; paraphysibus numerosis, filiformibus; sporidiis obscure brunneis, late ellipsoideis 1-2-guttulatis, 4,5-7 \times 3,5-4.

Hab. in ligno putri Fagi silvaticæ prope Pressbaum Wiener Wald Austriæ.

2. **Sphaeroderma texanicum** Rehm, Ascom. Amer. bor., Ann. Myc. 4858 v. III (1905) p. 519. — Peritheciis sessilibus in crustulam nigrescentem effusam arcte congregatis, globulosis, haud papillulatis, poro minutissimo pertusis, glabris, modo ad basim hyphis nonnullis hyalinis vestitis, mox collabentibus, membranaceis, nigro-fuscidulis, 100-150 μ . diam.; ascis cylindraceis, apice truncatis, c. 100 \times 14, quadri-octosporis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, guttis oleosis carentibus, subfuscis, 12 \times 6-7, strato mucoso tenui obductis, 1-stichis; paraphysibus ramosis.

Hab. ad lignum putridum, Texas (TRECUL 1848, comm. Dr. PAZSCHKE). — Secundum texturam mollem peritheci ad *Hypocreaceas*, subiculo nullo conspicuo ad *Sphaerodermatidis* subg. *Vittadinula* Sacc. pertinens species, *Collematis* instar crustulam præbet. Proximum *Sphaerodermati Belladonnæ* Tassi, imprimis peritheciis multo majoribus alienum.

3. **Sphaeroderma Rickianum** Rehm in Theissen, in Ann. Mycol. V 4859 (1907) p. 530 et Ann. Mycol. 1910, p. 461-462 c. ic. — Peritheciis 3-20 in acervulos 1-3 mm. latos, 1 mm. cr., brunneo-nigros, ligno nudo insidentibus dense aggregatis, c. $\frac{1}{2}$ mm. diam., vertice griseo-decoloratis, poro latiuscule pertusis, strato stupposo compactiusculo (ex hyphis brunneis, septatis, 5 μ . cr. efformato) insiden-

(*) Ad pag. 781 vol. XVII (*Sphaeroderma aureum*); pro «Peritheciis atro-brunneis» corrige: «aureo-brunneis».

tibus eoque circum circa, excepto vertice, vestitis, hyphis radiantibus usque ad 240 μ . longis; ascis recte cylindraceutis, supra rotundatis infra breviter pedicellatis, 130-150 \times 13, octosporis; sporidiis obscure brunneis, continuis, fusoideo-ellipsoideis, plano-convexis, utrinque attenuato-rotundatis, 23-26 \times 10-12, strato mucoso angusto cinctis.

Hab. in lignis decorticatis, Sao Leopoldo Rio Grande do Sul Brasilia. — A genere *Rosellinice* recedit contextu molli peritheci.

4. *Sphæroderma argentinense* Spegazz., An. Mus. Nac Buenos Aires 4860 t. XIX (1909) pag. 405. — Peritheciis sparsis v. hinc inde laxe gregariis, globosis, 200-250 μ . diam., subiculo tenuissimo concolore parvissimo cinctis; ascis ellipsoideis longiuscule pedicellatis, p. sp. 50-60 \times 30-40, mox diffluentibus, octosporis; sporidiis ellipsoideo-limoniformibus, fuligineis, 20-25 \times 15-16, levibus.

Hab. ad rhachides putrescentes Musæ sapientum, La Plata Rep. Argentina Amer. austr. — *Sph. bulbifero* Berl. affinis species, sporidiis brevioribus crassioribusque tamen distincta.

5. *Sphæroderma epimyces* von Höhnelt, Fragm. z. Mykol., Sitzb. k. 4861 Ak. d. Wissensch. Wien Bd. CXVI, Abt. I (1907) pag. 103. — Peritheciis gregariis, globosis, astomis epapillatis, primum flavidis dein sordide brunneolis, circ. 310 μ . diam., primum plus minus immersis dein superficialibus, subliberis; contextu peritheci crassiusculo, carnoso, flavo, grosse parenchymatico; ascis apapillatis, octosporis ovoideo-piriformibus, clavatis, tenuiter tunicatis, supra late rotundatis, basi breviter crasseque stipitatis, 80-92 \times 28-32; sporidiis confertis, unilocularibus, late citriformibus, depressis, sectione subellipsoideis, e pallide griseo-violaceis v. obscure olivaceis opace nigris, utrinque breviter cylindraceuto-appendiculatis, sæpe angulosis, multiguttulatis, 24-28 \times 13-18 \times 11-12.

Hab. parasitice in stromate Hypomycetis ochracei prope Pressbaum Austriæ inf. — *Sph. episphaerio* (Ph. et Pl.) affine sed characteribus perithecorum sporidiorumque diversum.

6. *Sphæroderma hypomyces* v. Höhnelt, Fragm. z. Mykol., Sitzb. k. 4862 Ak. d. Wis. Wien Bd. CXVI, Abt. I (1907) p. 102. — Subiculo arachnoideo, tenui, evanido; peritheciis globosis, liberis vel basi adnatis, astomis epapillatis, sparsis v. confertis, pallide ochraceo-flavis, dein pallide brunneolis, 400-550 μ . diam. extus glabris, levibus v. parce pilosulis (pilis hyalinis 50 \times 2-4); contextu peritheci crassiusculo, carnoso, flavo, parenchymatico (cellulis usque ad

25 μ . latis); ascis aparaphysatis, tenuiter tunicatis, clavatis, basi breviter stipitatis, octosporis, $80 \approx 16-20$; sporidiis distichis v. confertis, griseo-nigris, multiguttulatis, unilocularibus, fusoideis, utrinque obtusis, lateraliter depressis, $20-21 \approx 8 \approx 7$.

Hab. parasitice ad lamellas Lactarii pergameni, prope Pressbaum Austriæ inf. — Subiculum arachnoideum saltem partim *Hypomycei* pertinens.

7. **Sphæroderma Wentii** (Koord.) Sacc. et Trott., *Melanospora Wentii* 4863 Koord., Botan. Untersuch. (1907) pag. 172, fig. 11 et tab. XII fig. 18. — Peritheciis hyalinis erostratis, in subiculo effuso arachnoideo sublibere insidentibus, globulosis 250-270 μ . long. et 220-240 μ . latis; ostiolo conico 90-100 μ . longo, apice mutico; ascis 4-8-sporis; sporidiis ellipsoideis, continuis, fuscis, 25-25,5 μ . longis et 15-18 μ . latis.

Hab. in foliis emortuis Fici elasticæ pr. Purworedjo prov. Kedu ins. Java (KOORDERS).

SPHÆRODERMELLA v. Hönel ad int., Fragm. z. Mykol., III Sitzb. k. Ak. d. Wissensch. Wien Bd. CXVI, Abt. I (1907) pag. 105, *Sphærodermatella* Seaver, Mycologia I, p. 182. Dignoscitur a *Sphærodermate* ostiolo setuloso et sporidiis muco obvolutis. — Huc spectant: *Sphæroderma Helleri* (Earle) Sacc. — Syll. XVII, p. 781 — et *Rosellinia Niesslii* Auersw. — Syll. II, p. 270.

CREOSPHERIA Theiss., Beih. Bot. Centralbl. Bd. XXVII (1910) Abt. II, p. 396 (Etym. *creas* caro et *Sphaeria*). — Perithecia singula v. in stroma commune juncta, erumpentia, dein libera, basi vix innata, atra, non carbonacea, contextu medio carnosomolli; asci cylindraceuti, 8-sporis paraphysati; sporidia brunnea continua; paraphyses simplicies filiformes. — Genus *Rosellinia* proximum, contextu carnosostromatibusque compositis recedens; sed verisimillime idem est ac *Sphærodermella*.

1. **Creosphæria riograndensis** Theiss., l. c. pag. 396. — Peritheciis 4864 erumpentibus, corticis laciniis cinctis, demum liberis, basi breviter innatis, atris, conoideis, 1-1,5 mm. diam., superficie rimosa, levi, contextu sanguineo, carnosomolli, pariete peritheciali crassiusculo compacto atro; stromatibus compositis, pulvinulos 2-3 mm. latos, pluriloculares (raro strata magis effusa sistentibus) rotundatos, rimosorugosos, parce minuteque papillatos, ætate poro umbilicato et perithecia plerumque 3-6 globosa vel applanata 900-1400 μ . diam.

continentes, cortice epidermali communi tectos formantibus; ascis anguste cylindraceis, longissime (usque ad 120 μ .) pedicellatis, p. spor. 88-100 \times 5-5,5; paraphysibus copiosis eseptatis, filiformibus, 2 μ . cr.; sporidiis octonis, ellipsoideis, 8,5-12 \times 3,8-4,6 v. oblongis 13 \times 3,5, brunneis, rectis, utrinque rotundatis, 1-2-guttulatis.

Hab. ad cortices emortuos, Sao Leopoldo Rio Grande do Sul Brasiliæ.

NIGROSPHÆRIA N. L. Gardner, Univ. California Publ. Bot. v. II (1905) n. 6, p. 179, pl. XVIII (Etym. *niger* ob sporidia atra). — Mycelium parasiticum, ex hyphis parvis albis in contextum subhymeniale matricis penetrantibus formatum. Perithecia sphaerica absque ostiolo, e singulo filamento erecto myceliali oriunda, excipulo albo, glabro. Asci late clavati, aparaphysati; sporidia continua, oblonga, brunnea v. nigricantia. — Huc pertinet *Sphaeria* (*Hypocrea*) *Setchellii* Harkness — Sacc., Syll. XVI, p. 564 (sub *Melanospora*). Verisimiliter genus *Nigrosphaeria* a *Sphaerodermate* non satis differt.

MELANOSPORA Corda — Syll. II p. 461, IX p. 950, XI p. 356, XIV p. 626, XVI p. 563, XVII p. 781.

1. *Melanospora rhizophila* Pegl. et Sacc. sp. n. — Peritheciis subsparsis v. gregariis, minutissimis, superficialibus, globulosis, 150-200 μ . diam., in ostiolum cylindraceum, 160 \times 30, apice fimbriatum abrupte tenuatis, hinc phialiformibus, glabris, luce directa nigricantibus, contextu vero tenuiter carnosulo, sordide roseo, perithecii minute parenchymatico, ostioli prosenchymatico; ascis ovato-oblongis 50-55 \times 20-22 subsessilibus, octosporis, aparaphysatis mox evanidis; sporidiis distichis ellipsoideo-limoniformibus, h. e. utrinque apiculatis, primo brunneis, grosse 1-guttatis, dein fuliginosis.

Hab. in radicibus putrescentibus Cucurbitæ Peponis, Fer rara, Ital. bor., socia *Fusarii* specie, forte ejusdem status conidio-phorus (V. PEGLION). — Affinis *Melanosporæ vervecinæ*, a qua glabritie et minutie omnium partium statim dignoscitur. Perithecia interdum etiam intra radículas putres matricis inveniuntur.

GIBSONIA Masee, Ann. Bot. XXIII (1909) p. 336 et Trans. Brit. Mycol. Soc. III (1910) p. 221 (Etym. a prof. H. GIBSON). — Perithecia subglobosa, superficialia, membranacea, olivacea, ostiolo longe cylindraceo apice fimbriato prædita. Asci octospori facile dif-

fluentes; sporidia continua brunnea, ellipsoidea, in massam mucosam eructata. — An satis diversum genus a *Melanospora*?

1. *Gibsonia phæospora* Masee, l. c. cum fig. in textu. — Peritheciis 4866 sparsis 1 mm. alt, subglobosis olivaceis glabris, hyphis basi repentibus, in longum ostiolum abrupte desinentibus; contextu parenchymatico ex cellulis polygoniis composito; ascis cylindricis, sporidiis monostichis, ellipsoideis, brunneis, continuis 14-15 × 7-8.

Hab. in massa decomposita *Saprolegniarum*, rarius in Lancashire Britannia (Prof. H. GIBSON).

HYPOXYLINA Starb., Ascom. Schw. Chaco-Cordill. Exp. Arkiv. f. Bot. Bd. V (1905) p. 29 (Etym. ab *Hypoxylon*, cujus est analogon genus). — Stroma pulvinatum vel pulvinato-effusum, tenue; perithecia acervulatum conjuncta, contextu carnosissimo prosenchymatico nectrioideo; sporidia continua, ellipsoidea, fusca. — *Hypoxylon* primo obtutu in memoriam revocat sed texturâ mollissima, sub lente, si tenuissime præparata, lilacino-vinosa, genus facile Hypocreaceis adscribendum; a *Penzigia* peritheciis semilibris vel basi tantum conjunctis nec non textura plane differt.

1. *Hypoxylina umbilicata* Starb., l. c. p. 29. — Acervulis peritheciis 4867 stromate basilari coninuctis et insidentibus, sparsis, hemisphaericis vel tuberculatis, denique applanatis, interdum confluentibus et effusis, orbicularibus, 1-2 mm. diam. vel oblongatis, 1-3 × $\frac{1}{2}$ -2 mm., circa 1 mm. altis, ad basim pilis parvis, fuscis, septatis, 5 μ . crassis obsessis; peritheciis sphaerioides, papilla discoidea, profunde nigro-umbilicata ornatis, villo furfuraceo fusco-ferrugineo, deinde lateritio-fusco omnino vestitis, textura carnosissima vel vix carnosocoriacea, densissime prosenchymatica vel subparenchymatica, sub lente fusco-nigra, sed tenuissime præparata lilacina, 500-600 μ . diam.; ascis lineariter cylindræis, sursum obtusatis, longe pedicellatis, 89-101 × 9-10 (p. sp.); sporidiis octonis, monostichis, sæpe imbricatis, ellipsoideis, inæquilateralibus, vetustis navicularibus, utrinque acutiusculis, primo hyalinis biguttulatis, deinde fuscis; paraphysibus parvis, filiformibus, diffluentibus.

Hab. in ramulis aridis arboris «algorobo» nominati ad rio S. Francisco, prov Jujuy Argentina et in ramulis *Mimosæ* sp., Gran Chaco, Tatarenda Bolivia.

WAWELIA Namyslowsky, Kosmos XXXIII (1908) p. 330; Bull. Ac. d. Sc. de Cracovie 1908 pag. 597, 6 fig. (Etym. a Monte Wawel

Cracoviæ, ubi est castrum olim sedes regum polonicorum et ubi fungillus detectus est). — Stromata cylindraceo-conica, plerumque simplicia, alba, carnosæ, matrice leviter infixæ, demum flavescenti brunneolæ. Perithecia concoloria in parte media stromatis superficialia, globoso-conica, satis conferta numerosa, stromatis basim et sæpe quoque apicem nuda relinquentia; asci cylindracei, paraphysati, 4-spori; sporidia ovoidea, continua, nigricantia, levia. Conidia adsunt. — Genus insigne, habitu *Racemellæ* (Cordyceps).

1. **Wawelia regia** Nam., l. c. — Characteres generis; stromatibus 4868 gregariis, sæpius basim et apicem versus tenuatis, 5-12 mm. alt., 1-2 mm. cr.; peritheciis prominentibus obtuse papillatis, pertusis, 240-300 μ . diam., hyphis filiformibus conidiophoris confertiusculis ascendentibus vestitis; ascis 60-80 μ . long., apice rotundatis, deorsum sensim tenuatis, paraphysibus multi-cellularibus, duplo longioribus, crassiusculis obvallatis, tetrasporis; sporidiis monostichis, ovoideis, livido-nigricantibus, 6-8 \times 4-6; conidiis singulis v. gregatis acrogenis, achrois, ovoideis, 4-6 \times 2.

Hab. in fimo Cuniculorum Cracoviæ, Polonia.

COLLETOMANGINIA Har. et Patouill., C. R. Acad. Fr. CXLII (1906) p. 224-226, Bot. Centralbl., CI (1906) n. 24, pag. 632 (Etym. a cll. COLLET et MANGIN). — Stroma hemisphæricum, cavum, magnum, superficie alveolato-excavatum, fere *Morchellæ* ad instar, carnosum, pallidum; perithecia in fundo areolarum immersa, phialiformia, collo longiusculo in ostiolum vix emergens dehiscentia, carnosæ, nigricantia; asci filiformi-paraphysati, cylindracei, apice jodo colorati, octospori; sporidia ovoidea, continua, nigricantia. — Genus anceps inter *Xylariaceas* molliores et *Hypocreaceas* medium, habitu vero *Helvellacearum*.

1. **Colletomanginia paradoxa** Har. et Pat., l. c. p. 224. — Characteres 4869 generis; stromate 17 cm. diam., alveolarum cristis 2-3 cm. alt.; peritheciis in fundo areolarum ab eis denigrato 3-4 seriatis; ascis 190 \times 20; sporidiis 18-24 \times 12-15.

Hab. ad truncos *Abietis* pectinatae in Afr. orient. britannica.

Sect. 3. Hyalodidymæ.

CHARONECTRIA Sacc. — Syll. II p. 466, IX p. 953, XVI p. 1140, XVII p. 782.

1. *Charonectria succinea* (Rob. et Desm.) Sacc. — Syll. IX p. 953 — 4870 var. *bractearum* Sacc., Ann. Mycol. VI (1908). — A typo vix differre videtur ascis cylindraceis nec vere clavulatis et loco.

Hab. in bracteis languidis v. emortuis Carpini Betuli, Rigny sur Arroux Gallie (FLAGEOLET). — Asci 68-80 \times 8; sporidia oblique monosticha, 8,5-11 \times 5-5,5, hyalina, 1-septata non constricta, hyalina; contextus peritheci fulvo-melleus.

2. *Charonectria fimicola* v. Höhn., Oest. Bot. Zeitschr. LV (1905) 4871 p. 22, Rehm, Ascom. exsicc. n. 1587. — Peritheciis piriformibus 250-300 μ . latis, 400 μ . alt., rostello 165 μ . long., 140 μ . cr. præditis, plerumque omnino immersis et rostello prominentibus, subhyalinis v. flavido-albis, siccis sordide flavidis, nucleo rubido præditis, parietibus 30 μ . cr., e cellulis parenchymaticis 6-20 μ . cr. constitutis, extus levibus; ascis numerosis, cylindraceis 100-120 \times 5-6, octosporis; sporidiis rectis, monostichis, pallide flavo-aurantiacis, tenui-tunicatis, late ellipsoideis, septatis ibique parum constrictis, extus longitudinaliter striatis, 10-13 \times 5-5,5; paraphysibus paucis filiformibus, 2-3 μ . cr.

Hab. in fimo Damæ vulgaris sub vitro servato ex Sparbacher Tiergarten, Wiener Wald Austriæ.

NECTRIA Fr. — Syll. II p. 479, IX p. 955, XI p. 357, XIV p. 628, XVI p. 565, XVII p. 778. — Cfr. v. Höhn., Ann. Myc. VIII (1910) p. 464.

I. *Eu-Nectria* Sacc.

1. *Nectria tucumanensis* Speg., An. Mus. Nac. Buenos Aires t. XIX 4872 (1909) p. 407, cum icone. — Peritheciis cæspitosis erumpenti-superficialibus sordide rubris coriaceo-carnosulis, stromate parcissimo insidentibus, udis globosis 250-300 μ . diam., ostiolo obscuriore vix papillato ornatis; ascis subfusoideis breviter pedicellatis 90-120 \times 20-40, paraphysatis v. non, octosporis; sporidiis suballantoideis medio septatis, loculis facile secedentibus, hyalinis, 35-40 \times 12-15.

Hab. ad ramos dejectos putrescentes *Anonæ Cherimoliæ* nec non *Celtidum* in sepibus circa Tucumán, Argentina Amer. austr. — Species eximia sporidiorum articulis facile secedentibus ad *Hypocream*, *Bresadolellam* v. Höhn. nec non *Neorehmiæ* v. Höhn. præcipue accedens.

2. *Nectria oculata* v. Höhn. Fragm. Mykol. IX in Stzb. k. Ak. d. 4873

Wiss. Wien CXVIII (1909) Abt. I, p. 1475. — Peritheciis gregariis, superficialibus, solitariis v. seriatis, stromate visibili nullo, globosis 400-450 μ . latis, obscure cinnabarinis, e nitidulo subopacis, ostiolo depresso, rotundato 10-12 μ . lato, papilla depressa nitidula, e rubro-brunneo nigricante 180 μ . lata prædito; membrana peritheciæ parenchymatica 35-45 μ . cr.; paraphysibus parvis, filiformibus, diffuentibus; ascis tunica tenuissima præditis, cylindraceis, octosporis, 80-86 \times 6-8; sporidiis recte v. oblique monostichis, hyalinis, levibus, elongato-ellipsoideis, sæpe lateraliter depressis, rectis, apice vix angustatis obtusulis, plasmate indistincte quadripartito, ad septum medium tenue non costrictis, 12-13 \times 5,5-6.

Hab. in ramis *Albizziae moluccanæ* (?) in horto bot. Buitenzorg in ins. Java. — *N. mammoideæ* Plowr. affinis.

3. *Nectria vicina* Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) 4874

p. 403. — Peritheciis globosis 180-200 μ . diam. aurantiacis, minute papillato-ostiatis, erumpenti-superficialibus, 3-5-gregariis, carnosulis; ascis obclavatis, brevissime pedicellatis, 90-100 \times 20, paraphysibus grosse articulatis cinctis; sporidiis cylindraceis, rectis v. vix inaequaliter, non costrictis, hyalinis, 30 \times 10.

Hab. ad ramos emortuos *Serjaniae* cujusdam, Parque Roca, Tucumán, Argentinae Amer. austr. — *N. tucumanensi* Speg. simillima et facile ejusdem varietatem sistens, peritheciis aurantiacis sporidiisque minoribus et oculis non secedentibus satis distincta.

4. *Nectria diversispora* Petch, Ann. Roy. Bot. Gard. Peradenya III 4875

Pt. I (1906) p. 4. — Peritheciis 0,25 mm. diam., solitariis v. agglomeratis, nullo stromate, rubris, subdiaphanis, granulatis, ostiis conoideis, ochraceis; paraphysibus linearibus; ascis 80-100 \times 10-15; sporidiis oblique monostichis, hyalinis, 11-13 \times 4-5, uniseptatis, medio costrictis, strictis, ovatis, apicibus obtusis, oculis sæpe inaequalibus, apicibus sæpe rotundatis.

Hab. in ligno emortuo *Heveæ brasiliensis* et in ramis emortuis *Theæ viridis*, Ceylon.

5. *Nectria Castilloe* Turconi et Maffei, Atti Ist. Bot. Univ. Pavia 4876 ser. II, p. 332, tab. XII, fig. 2. — Peritheciis compluribus, in

hypostromate carnosulo, pulvinato, pallide flavido insidentibus, dense aggregatis v. parum discretis, in cæspitulos obscure rubro-carneos, pulvinato-verruciformes, rotundatos, quandoque irregulariter radiatim subcirculares erumpentibus, superficialibus, ovatis v. ovato-globosis, 250-300 \times 150-250; contextu pseudoparenchymatico rubro incarnato; ascis e fundo peritheciis irradiantibus, cylindræis v. subclavatis, aparaphysatis, 60-80 \times 15-20, octosporis; sporidiis oblique monostichis, rariter subdistichis, ellipsoideis, utrinque rotundatis, medio uniseptatis, 10 \times 3, hyalino-fusculis.

Hab. in ramis *Castilloæ* elasticæ, Mexico Amer. bor. — Adest quoque status conid. formam *Fusarii* sistens; sporodochiis initio cortice tectis, dein erumpentibus, pulvinatis v. pulvinato-verruciformibus, flavido-albis; conidiis fusoides, plerumque arcuatis, rariter subrectis, utrinque acutatis, 4-8-septatis, 60-90 \times 4-6, hyalinis, conidiophoris perexiguis suffultis.

6. **Nectria seminicola** Seaver, Mycologia I (1909) pag. 21, tab. II, 4877 fig. 59. — Peritheciis cæspitosis, cæspitibus minutis, confluentibus, interdum seminis superficiem totam occupantibus; peritheciis subglobosis ostiolo minuto papillato præditis, glabris v. subglabris, 250 μ . diam., aurantiacis, senio aureo-flavis v. albidis; ascis clavatis, 40-50 μ . long., octosporis; sporidiis pro more 2-seriatis v. irregulariter positis, hyalinis, 1-septatis, subconstrictis, 10-14 \times 3-3.5.

Hab. ad semina partim putrida *Spathyemæ* fœtidæ, New York Amer. bor. — Status conidiophorus (*Dendrodochii* spec.): mycelio albo, stromata dein purpurascens formante; conidiophoris erectis, arrecto-ramosissimis apice conidia hyalina ellipsoidea 5-7 \times 2-3, uni-biguttata gerentibus.

7. **Nectria bogoriensis** Bernard, Bull. Dép. Agric. Neerland. XI (1907) 4878 p. 45, fig. 58-61. — Peritheciis hypostromate pulvinato, irregulari, obtuse papillatis, ex hyphis laxè intertextis, carneis formato suffultis, globoso-piriformibus, 200 μ . lat. e viridi rubro-aurantiis, contextu pseudoparenchymatico ex unico cellularum strato denso conflato; ascis octosporis aparaphysatis, fusoides, subsessilibus, apice obtusulis, 50-55 \times 8-9; sporidiis ellipsoideo-oblongis, utrinque obtusulis, medio 1-septatis, constrictis, hyalinis, 10-12 \times 4-5.

Hab. in caulibus *Vanillæ* spec. Tjikeumeuh ins. Javæ. — Forte species noxia. Dimensiones ex iconibus petitæ.

8. **Nectria fallax** Rick, Fungi austro-amer. III-IV, n. 44, Ann. Myc. 4879 v. IV (1906) p. 309. — Peritheciis aggregatis $\frac{3}{4}$ mm. diam., orbicularibus, luteo-succineis, furfure stramineo conspersis, ostiolis

minutis obtusis vitreis; ascis linearibus $100 \approx 10$, facile diffuentibus; sporidiis octonis, ovalibus vel cylindraceutis, valde inæqualibus $8-16 \approx 6-9$ biguttulatis, in septo vix compressis, olivaceis, mucotenni obvallatis, exosporio crasso striis longitudinalibus irregularibus pictis; paraphysibus nullis.

Hab. in ligno frondoso, Sao Leopoldo, Brasilia. — A ceteris speciebus sporidiis irregulariter striatis dignoscenda.

9. *Nectria betulina* Rehm, Ascom. Amer. bor., Ann. Myc. vol. III 4886 (1905) p. 519. — Peritheciis in stromate flavidulo, 1,5 cm. long., 2-3 mm. lat. per rimas transversas corticis erumpente arcte congregatis, sessilibus, globulosis, haud papillulatis, poro vix conspicuo pertusis, demum patellariformiter collabentibus, dilute carneis, haud nitentibus, scabriusculis, contextu parenchymatico flavidulo 0,3-0,4 mm. diam., membranaceis; ascis cylindraceutis, apice rotundatis, $50-60 \approx 8-9$, octosporis; sporidiis oblongis, utrinque rotundatis, medio septatis, non constrictis, utraque cellula guttam magnam oleosam includente, hyalinis, $9-10 \approx 4$, 1-stichis; paraphysibus haud visibilibus.

Hab. ad lignum betulinum, Cajuga Lake Flora New York Amer. bor. (Dr. ATKINSON). — *Nectria ochracea* forte proxima, sed sporidiis multo minoribus plane diversa.

10. *Nectria leprosa* P. Henn., Engl. Jahrb. XXXVIII (1905) p. 112. 4881 — Cæspitulis 1-2 mm. diam.; peritheciis dense cæspitosis, flavido aurantiis, ovoideis v. subglobosis, papillatis, c. 300 μ . diam., squamis furfuraceis, pallidis vestitis; ascis clavatis, vertice rotundatis, octosporis, $80-100 \approx 14-20$; sporidiis oblongis, rectis vel curvulis, subdistichis, utrinque obtuse rotundatis, biguttulatis, medio 1-septatis, $24-32 \approx 8-10$, ex hyalino subflavidulis.

Hab. ad cortices arborum, Amani Usambara or. Africæ centr. (EICHELBaum).

11. *Nectria amaniensis* P. Henn., Engl. Jahrb. XXXVIII (1905) 4882 p. 112. — Cæspitulis subglobosis, firmis, c. 1-2 mm. diam.; peritheciis dense aggregatis confluentibusque, papillatis, rufo-brunneis; ascis cylindraceuto-clavatis, obtusis, 2-guttulatis, medio 1-septatis, constrictiusculis, hyalinis, $9-12 \approx 4-5$; conidiis ellipsoideis, hyalinis, $5-6 \approx 2,5-3$.

Hab. in ramis siccis Amani Usambara orient. Africæ centr. (EICHELBaum).

12. *Nectria coccineo-nigra* Starb., Ascom. Schwed. Caco-Cordill. Exp., 4883 Arkiv f. Bot. Bd. V (1905) p. 8. — Stromatibus immersis, erum-

pentibus, pulvinatulo-applanatis, basi paullum contractis, gregariis, interdum confluentibus, intus aurantiaco-luteis, acervulos orbiculatim vel polygone determinatos efficientibus, 1-3 mm. diam.; peritheciis superficialibus, 2-50 densissime aggregatis, plane fere inter se liberis vel basi confluentibus, sphaërioides vel subovoideis, pulcherrime verruculosus, primo aurantiaco-coccineis, distincte obscurius fere nigro-papillatis, deinde rubro-fuscescentibus vel nigro-purpureis, 250-300 μ . diam., textura hypocreacea; ascis octosporis forma maxime varia, fusiformibus vel cylindraceo-clavatis, vel (ob sporidia conglobata) oblongatis 57-65 \times 10-12; sporidiis mono-distichis, interdum conglobatis, ellipsoideis, medio septatis, non vel vix constrictis, episporio crasso, distincte oblique et undulatim striato, loculis crasse guttulatis, 12,5-15 \times 6-7,5; paraphysibus nullis (?).

Hab. in ramulis aridis, Gran Chaco, Tatarenda Bolivia. — *N. hematochromæ* Speg. quam maxime affinis; differt tamen ostioliis, situ et forma sporidiorum; inter Nectrias sporidiis striatis bene distincta.

13. *Nectria asperata* Rehm, Ascom. Exsicc. fasc. 43, n. 1816 et Ann. 4884 Mycol. VII (1909) p. 137. — Peritheciis sessilibus, plus minusve arcte congregatis, globosis, minutissime umbilicatis, poro perspicuo pertusis, mox urceolato-impressis, 0,25-0,3 mm. diam., aurantiaco-rubris v. coccineis, glabris, haud nitentibus, siccis scabris; peritheciis membranaceis e cellulis permagnis, suborbicularibus, 18-20 diam. compositis; ascis fusiformibus c. 70 \times 10, 8-sporis; sporidiis ellipsoideis medio septatis, vix constrictis, utraque cellula magniguttata, hyalinis, 12-15 \times 5(-7), distichis paraphysibus filiformibus 3 μ . lat.

Hab. ad corticem plantæ indetermin., Sao Leopoldo Rio grande do Sul Brasiliæ (THEISSEN). — *Nectr. cinnabarinæ*, *Nectr. Veuillotianæ*, *Nectr. illudentis* variis characteribus proxima.

14. *Nectria cæspiticia* Syd., in de Wildem., Flora Bas-Moy. Congo 4885 t. III, fasc. I (1909) Extr. p. 14. — Peritheciis stromate pulvinato 1-2 mm. diam., cæspitosim insidentibus et dense confertis, globulosis, tandem centro leniter collabascentibus, minute papillatis, c. 200 μ . diam. verrucis pro ratione majusculis ochraceis ubique denseque tectis; ascis fusideo-clavatis, 45-55 \times 18-15; sporidiis distichis, oblongis, utrinque obtusis, medio septatis, non v. leniter constrictis, hyalinis, 24-32 \times 8-12.

Hab. in cortice arboris cujusdam Kisantu Congo Afric. trop.

(VANDERYST).

15. *Nectria cinnabarina* (Tode) Fr. — Syll. II, p. 479 — var. *jara-* 4886
guensis v. Höhnelt, *Ergeb. Bot. Exp. Südbras.* 1901, *Denk. k. Ak.*
d. Wiss. Wien Bd. LXXXIII (1907) *Extr. pag. 18.* — A typo
differt peritheciis 600-650 μ . diam.; sporidiis pallide rubidis, ro-
tundato-ellipsoideis 14-17 \times 6,5-7; ascis 90-98 \times 7-8.

Hab. in cortice rami cujusdam emortui, Jaraguaberg Sao Paulo
Brasilia.

16. *Nectria Noackiana* Syd., *Ann. Mycol.* V (1907) p. 358. — Peri- 4887
theciis erumpenti-superficialibus, in glomerulos minutos 1-2 mm.
latos 5-30 densissime caespitosis, stromate minuto, hemisphaerico,
e globoso ovatis v. subpiriformibus, in sicco semper distincte col-
labascentibus et pezizoideis, cinnabarinis, dein fuscidulis, glabris,
ca. 200-300 μ . diam.; ascis cylindraceo-clavatis, apice rotundatis,
basi attenuatis, 55-80 \times 10-13, octosporis; sporidiis irregulariter di-
stichis, oblongis vel oblongo-elongatis, utrinque rotundatis, rectis
vel leniter inaequilateris, medio 1-septatis, vix constrictis, hyalinis,
guttulatis, 17-28 \times 6-9.

Hab. in cortice plantæ scandentis cujusdam, Araraquara, Prov.
Sao Paulo, Brasilia.

17. *Nectria lunulata* von Höhnelt, *Ergeb. Bot. Exp. Südbras.* 1901, 4888
Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) *Extr. p. 19.*
— Peritheciis hypophyllis in maculis indistinctis insidentibus, va-
riabilibus plus v. minus arcte confertis, greges 0,5-3 mm. diam.
efformantibus, in stromate superficiali tenui indistincte insidenti-
bus, griseo-brunneolis, membranaceo-coriaceis, irregulariter globo-
sis, ovoideis, minute papillatis, 200-250 μ . diam.; contextu obscure
flavo-brunneo, grosse parenchymatico; ascis clavatis, sessilibus,
tunica crassiuscula præditis, 70-92 \times 9-10, octosporis, paraphysibus
filiformibus numerosis obsitis; sporidiis distichis, fusoideis, utrin-
que acutatis v. obtusiusculis, minute multiguttulatis, rectis sed
plerumque falcatis v. lunulatis, 17-20 \times 3-5.

Hab. in pagina inf. foliorum *Smilacis* sp., Parnahyba Sao
Paulo Brasilia. — *Pycnidia* immixta (*Zythia* sp.), sporulis numerosis
globosis v. elongatis, 1-2 μ . cr. prædita. *Nectria Bonanseana* Sacc.
valde affinis.

18. *Nectria ignea* v. Höhnelt, *Fragm. Myk.* IX (1909) in *Sitzb. k. Ak.* 4889
Wiss. Wien CXVIII, Abt. I, p. 1475 (corr. *ignia*). — Hypostro-
matibus plerumque dense gregariis, superficialibus, rubro-aurantia.

cis, membranaceis, usque ad 250 μ . latis, irregulariter rotundatis, margine radiatim fibroso, ex hyphis plectenchymaticis floccosis 3-5 latis, flavis constitutis; peritheciis 1-5 globosis 105-150 μ . latis, 130-160 μ . altis, flammeis, levibus, glabris, apiculo ostiolarum circ. 30 μ . alto, 70 μ . lato; membrana 8 μ . cr. parenchymatica; ascis numerosis fusoido-conoideis, tenuiter tunicatis, sessilibus, 36-48 \times 5-7, octosporis; sporidiis mono- v. distichis, hyalinis, elongatis, apice obtusulis plasmate quadripartito præditis, demum bilocularibus, 8-12 \times 1,8-3; paraphysibus tenuiter filiformibus, mucosis.

Hab. in foliis putrescentibus Bambusæ in silivis Tjibodas in ins. Java.

19. **Nectria Marelliana** Speg., An. Mus. Nac. Buenos Aires t. XIX 4890 (1909) pag. 408. — Peritheciis ovatis 150 μ . diam., in stromate dense constipatis e globoso subhemisphæricis 0,5 mm. diam., rubro-fuscis, carnosulis, glabris; ascis cylindraceis, brevissime pedicellatis paraphysibus grosse articulato-cinctis, 100 \times 10, octosporis; sporidiis oblique monostichis ellipsoideis 14-16 \times 7-8, levibus hyalinis, loculis æquilongis sæpius grosse 1-guttulatis.

Hab. ad thallum vivum Ricasoliæ Casarettoanæ, Hornos prope La Plata Argentina Amer. austr. (C. MARELLI). — A *N. lichenicola* (Ces.) Sacc. peritheciis cæspitosis eximie distincta.

20. **Nectria Eichelbaumii** P. Henn., Engl. Jahrb. XXXVIII (1905) 4891 p. 111. — Stromatibus conidiophoris ceraceo-farinosis, albidis, minutis, hyphis ramosis, hyalinis, c. 1,5-2 μ . cr., conidiis subglobosis, hyalinis, c. 2 μ . cr.; peritheciis cæspitose dispositis, ovoideis vel subglobosis, papillatis, rufo-brunneis, c. 150-180 μ . cr.; ascis cylindraceis, obtusis, octosporis, 60-75 \times 4-6; sporidiis subdistichis v. monostichis, fusoides v. ellipsoideis, obtusis, longitudine obsolete striatis, hyalinis, 8-11 \times 3,5-4.

Hab. in stercore indeterminato in silvis prope Amani, Usambara orient. Africae centr. (EICHELBAUM).

II. *Dialonectria* Sacc.

21. **Nectria Papilionacearum** Seaver, Mycologia I (1909) p. 62, t. IV, 4892 fig. 7, tab. V, fig. 19. — Peritheciis hypophyllis, sparsis v. gregariis, hyphis mycelii albis basi cinctis, subconicis, lateritio-rubris v. cinnabarinis, 175-200 \times 150-175, contextu grosse celluloso, cellulis pro more 8-10 μ . diam.; ascis clavatis, octosporis, 75 \times 10;

sporidiis distichis, infra sæpe monostichis, fusoides, 1-septatis, ad septum constrictis, $15-17 \times 5-6$, loculis 1-pluriguttulatis.

Hab. in foliis Lespedezæ et Rhynchosia, socia *Parodiella*, Missouri et Carolina infer. Amer. bor.

22. *Nectria callispora* v. Höhn., Sitzb. k. Ak. d. Wiss. Wien CXVIII, 4898

Abt. I (1909) pag. 295, cum icon. — Peritheciis brunneis, opacis glabris, globosis, minute papillatis $400-450 \mu$. diam. sparsis vel 2-3-approximatis non immersis stromate destitutis; contextu ex cellulis globoso-polygoniis $5-6 \mu$. diam. formato; paraphysibus copiosis filiformibus dein deliquescentibus; ascis 7-8-sporis, $100-120 \times 22-28$, raro tetrasporis et tunc 90×13 , clavatis, apice rotundatis deorsum sensim tenuatis; sporidiis ellipsoideis, medio septatis, non constrictis, 2-4-guttulatis longitudinaliter albo-striatis, $20-25 \times 12$, hyalinis (in glycerina violaceo-griseis), quaternis oblique monostichis, octonis distichis.

Hab. in cortice vivo Albizzia moluccana in horto bot. Buitenzorg ins. Java. — A speciebus sporidiis striatis præditis bene distincta.

23. *Nectria Theobromæ* Masee, Kew Bulletin (1908) p. 218 et ap. 4894

Bancroft Handb. Diseas. West Ind. Plants 1910, p. 23; Howard West. Ind. Bull. v. II, p. 200; Stockdale, West. Ind. Bull. v. IX, p. 171. — Peritheciis gregariis v. sparsis, superficialibus, ovoideis, levibus, hyphis aurantiacis præditis, rubris, ostiolo minuto parum prominenti, 500μ . altis; ascis cylindraceutis, pedicellatis, octosporis; paraphysibus septatis, hyalinis, apice leniter incrassatis, 3μ . cr.; sporidiis oblique monostichis, hyalinis, ellipsoideis, uniseptatis, ad septum leniter constrictis, $28-30 \times 8-10$.

Hab. ad ramos Theobromæ Cacao quos valde lædit, Grenada, Trinidad, Dominica, St. Lucia, St. Vincent America centr.

24. *Nectria Strasser* Rehm, in Strasser Verh. zool.-bot. Ges. Wien 4895

LVII (1907) p. 308. — Peritheciis gregariis, sessilibus globosis, vix papillulatis, subhyalinis, glabris, ad basim hyphis nonnullis filiformibus, hyalinis, c. $20-25 \times 3$, obsessis, parenchymatice hyalino-contextis, $120-150 \mu$. diam., siccis pezizellæ ad instar urceolatis, dilute flavidulo-succineis; ascis clavatis, tenerrimis, $30-35 \times 5$, octosporis; sporidiis clavatis, medio septatis, utrinque biguttulatis, ad septum non constrictis, hyalinis, $6-8 \times 2-5$; paraphysibus distinctis tenerrimis, filiformibus.

Hab. ad caules siccos Menthae silvestris in monte Sonntagberg Austriae inf. (STRASSER). — *N. inconspicua* Starb. affinis

sed præcipue differt sporidiis minoribus. Socia adest etiam *N. fuscidula* Rehm.

25. *Nectria saccharicola* Speg. — Syll. XIV, p. 634 — var. *Acanthaceæ* Rehm, Ascom. Exsicc. fasc. 43, n. 1815 et Ann. Mycol. VII (1909) p. 137. — Peritheciis sessilibus, primitus conoideis, mox urceolatis, minime papillulatis, glabris, dispersis, interdum 2-3 arcte congregatis, dilute roseolis v. subcarneis, interdum aurantiaco-flavis, parenchymatice contextis, 0,15-0,2 mm. diam.; ascis fusiformibus 60-65 \times 10, 8-sporis; sporidiis ellipsoideis, utrinque acutatis, medio septatis, utraque cellula biguttata, hyalinis, 12 \times 5, distichis; paraphysibus nullis.

Hab. ad caules *Acanthaceæ*, Sao Leopoldo Rio Grande do Sul Brasiliæ (Rick).

26. *Nectria pezizoides* Kirschst., Verh. Bot. Ver. Brandenb. XLVIII (1906) pag. 58. — Peritheciis solitariis v. laxe gregariis, globosis, ostiolo infundibuliformi donatis, rubro-miniatis, extus albo-sulphureis, dein discoideo-collabescentibus et pallide flavis, 300-400 μ . diam.; ascis numerosis, fusoides, supra depressis, crasse tunicatis, sessilibus, octosporis, 50-60 \times 6-7; sporidiis oblique monostichis, ellipsoideis, utrinque rotundatis, medio septatis non constrictis, loculis uni-guttulatis, hyalinis, 12 \times 6; paraphysibus paucis, brevibus.

Hab. in ligno pineo putri prope Gross-Behnitz Germaniæ.

27. *Nectria obscura* Rehm, Ann. Mycol. V (1907) p. 543. — Peritheciis gregariis, sessilibus, fere semiglobosis, glabris, poro perspicuo pertusis, contextu parenchymatico molli, subfusco, 120-150 μ . diam., vix visibilibus; ascis cylindraceis, interdum subfusiformibus, 80 \times 10, octosporis; sporidiis fusiformibus, medio septatis, cellula superiore latiore, utrinque rotundatis, utraque cellula 1-guttata, hyalinis, 12 \times 5-6, plerumque monostichis; paraphysibus subramosis, tenerrimis, septatis, guttulatis, 3-4 μ . latis.

Hab. ad lignum putridum *Quercus*, Bois d'Escheringen Lotharingiæ (R. MAIRE).

28. *Nectria modesta* v. Höhnelt, Fragm. z. Mykol., Sitzb. k. k. Ak. d. Wissensch. Wien Bd. CXVI, Abt. I (1907) p. 106. — Peritheciis superficialibus, sparsis v. pauci-gregariis, ovoideo-piriformibus, 170-250 μ . latis, 240-400 μ . altis, sordide brunneo-flavis, ostiolato-papillatis, papilla rotundata 200 μ . alta, 140 μ . lata; contextu basi indistincte parenchymatico, fibroso-plectenchymatico, collo distincte parenchymatico, basi hyphis flavidis 3-4 μ . cr. vestitis; collo levi; paraphysibus numerosis, filiformibus; ascis tenuiter tu-

nicatis, cylindræis v. subclavatis, 90-100 \times 6-8, octosporis; sporidiis monostichis v. subdistichis, raro distichis, bilocularibus, vix constrictis, elongatis, utrinque rotundatis, omnino granulato-striatis, violaceo-brunneis, biguttulatis, 9-12 \times 4-5.

Hab. in ligno duro Betulæ prope Pressbaum et in ligno putri Carpini prope Untertullnerbach Austriæ inf.

29. *Nectria coccinea* (Pers.) Fr. — Syll. II, p. 481. — var. *platy-* 4900
spora Rehm, Ascom. Exsicc. fasc. 43, n. 1813 et Ann. Mycol. VII (1909) p. 137. — Sporidiis medio septatis, oblongis, utrinque valde rotundatis, utraque cellula magni-guttata, ad septum demum subconstrictis, hyalinis, 12-14 \times 8-9.

Hab. in cortice arboris ignotæ, Sao Leopoldo, Rio Grande do Sul Brasiliæ (Rick). *Nectr. compressæ* videtur etiam proxima.

30. *Nectria sakanensis* P. Henn., in Voeltzkow Reise Ostafrika III 4901
 (1908) p. 28, tab. III, fig. 20. — Peritheciis cæspitosis v. sparsis, subglobosis, fusco-papillatis, coccineis verruculosi, 180-200 μ . d.; ascis fusoides-clavatis apice obtusiusculis, octosporis 45-65 \times 8-12; sporidiis oblique monostichis v. subdistichis, oblongis, obtusis, uni-septatis, vix constrictis, hyalinis, 12-16 \times 5-6.

Hab. ad corticem arborum, Sakana Madagascar. — *N. sanguineæ* Sib. et *N. episphaerice* (Tod.) affinis sed peritheciis verruculosi, sporidiis majoribus etc. diversa.

31. *Nectria congensis* Syd., in De Wildem., Flora Bas- et Moy.- 4902
 Congo t. III, fasc. I (1909) p. 14. — Peritheciis sparsis v. sæpius 2-15 cæspitosim aggregatis, stromate nullo, globosis, non collabescentibus, 200-250 μ . diam., minutissime papillatis, rufo-ferrugineis, minute verrucosis; ascis fusoides v. cylindræis, 50-75 \times 7-13, octosporis; sporidiis oblique monostichis v. distichis, ellipsoideo-oblongis, utrinque leniter attenuatis, medio septatis non constrictis, hyalinis, 14-18 \times 5-6,5.

Hab. in cortice arboris cujusdam, Kisantu Congo Africæ trop. (VANDERYST).

32. *Nectria lucida* v. Höhn., Sitzb. k. Ag. d. Wiss. Wien CXVIII 4903
 Abt. I (1909) p. 298. — Peritheciis solitariis v. cæspitulosi, 500 μ . diam., initio læte cinnabarinis, dein coccineis demum brunneo-rubris, glabris, nitidis, globosis, non collabescentibus, minute saturatius papillatis et areolatis, contextu ex cellulis 3-4 μ . diam., solidiusculis formato; ostiolo 16 μ . lat.; paraphysibus paucis diffluis; ascis cylindricis octosporis, 110 \times 7; sporidiis monostichis el-

liptico-fusoideis rectis curvulisve, utrinque obtusulis, hyalinis, medio septatis non constrictis, levibus, quadriguttulatis, 12-16 \times 6.

Hab. in ramis vivis prope Tijbodas insulæ Javæ. — Præcipue peritheciis nitentibus distincta species. In sporidiis punctum atrum ad extremitates septi conspicitur.

33. *Nectria Inocarp* Patouill., Bull. Soc. Myc. Fr. XXII (1906) p. 58. 4904

— Peritheciis superficialibus, solitariis v. gregariis, stromate nullo, globosis v. ovoideis, papillatim ostiolatis, minutis, 250-300 μ . diam., collabescentibus, obscure rubris, superficie tuberculis obtusis 30-45 μ . altis præditis, contextu cellulis angulato-ovatis, 15-18 μ . diam., aurantiacis formato; sporidiis hyalinis, ellipsoideis, utrinque obtusis, 1-septatis, medio vix constrictis, 12-15 \times 6-7.

Hab. in fructibus putrescentibus inter silvas *Inocarp* edulis, Tahiti Polynesia.

34. *Nectria imperspicua* v. Höhnelt, Ergeb. Bot. Exp. Südbros. 1901, 4905

Denk. k. Ak. Wiss. Wien Bd. LXXXIII (1907) Extr. p. 18. — Peritheciis solitariis, e flavido pallide brunneolis, globosis, ostiolo papillatis, carnosus, circ. 180 μ . cr.; contextu minute parenchymatico; ascis clavatis, supra attenuato-acutatis, circ. 50 \times 6-9, octosporis; paraphysibus paucis v. nullis; sporidiis hyalinis, bilocularibus, plerumque submonostichis, elongatis, utrinque fere fusoideo-angustatis, utrinque obtusulis, medio non constrictis, rectis v. leniter curvulis, 11-12 \times 2,5-3.

Hab. parasitica in *Panico piloso* inter conidia *Ustilaginoideæ* usambarensis, Barra Mansa in districtu urbis Itapicirica Sao Paulo Brasilia.

35. *Nectria lophiostomacea* Starb., Ascom. Schwed. Chaco-Cordill. 4906

Exp., Arkiv. f. Bot. Bd. V (1905) p. 9. — Peritheciis sparsis v. nonnullis, gregariis, superficialibus, primo fere hyalinis, sphaeroides, deinde pallide ochraceis, collabescentibus, medio sæpissime ostiolo longitudinali compresso, obscuriore costatis, glaberrimis, textura membranacea, intricatim prosenchymatica, cellulis indistinctis, mycelio hyalino, tenuissime crustaceo cinetis, 75-90 μ . diam.; ascis octosporis, clavatis, sessilibus, sursum acutiusculis, 35,5-38 \times 9-10; sporidiis distichis, primo 4-guttulatis, deinde medio-septatis, cylindraceo-fusoideis, utrinque obtusis, hyalinis, 14-15 \times 3,8-4,5; paraphysibus nullis.

Hab. ad caules *Equiseti*, Quinta pr. Laguna de la Brea prov. Jujuy, Argentina. — Peritheciis minutissimis, siccitate (?) lophiostomaceis prædistincta species.

36. *Nectria episphæria* (Tode) Fr. — Syll. II, p. 497 — var. *gregaria* 4907
 Starb., Ascom. Schwed. Chaco-Cordill. Exp., Arkiv. f. Bot. Bd. V
 (1905) p. 9. — Peritheciis gregariis, interdum cæspitulse aggregatis, interdum nonnullis solitariis, e sphaerioideo compressis vel umbilicatum collabescentibus, sanguineis; ascis cylindraceo-clavatis, $75 \times 100 \times 10-12$; sporidiis superioribus distichis, inferioribus monostichis, ellipsoideis, vix medio constrictis, $15-18 \times 6-7,5$.

Hab. supra *Pyrenomycetes* (?), Santa Anna pr. Tarija. — A *Nect. episphæria* et ejus varietatibus magnitudine ascorum et sporidiorum differt; a *N. Leptosphaeria* Niessl sporidiis latoribus, peritheciis gregariis.

37. *Nectria sphæricola* Speg., Ann. Mus. Nac. Buenos Aires t. XVII 4908
 (1908) p. 128. — Peritheciis dense cæspitosis sed non confluentibus, globosis, $75-100 \mu$. diam., glabris, nitidulis, succineo-rubris, membranaceo-carnosulis; ascis fusoides apice truncatis $60 \times 10-15$; sporidiis ellipsoideis uniseptatis, non constrictis, levibus, hyalinis 16×8 , primo 2-3-guttulatis dein diblastis.

Hab. in stromatibus *Pyrenomycetum* plurimorum ad ramos dejectos putrescentes *Ilicis* paraguariensis prope Campo das Cuias Rep. Argentina Amer. austr. — Notis plurimis *N. episphæriae* accedens sed bene recteque distincta.

38. *Nectria Melanommatis* Syd., Hedwigia XLIX (1909) pag. 79. — 4909
 Peritheciis in stromatibus vetustis *Melanommatis* plerumque gregatim insidentibus, mox sparsis, mox dense aggregatis, globosis, $200-275 \mu$. diam., coccineis, vix papillatis, profunde collabentibus, minute granulato-verruculosis; ascis cylindraceo-clavatis, octosporis, $50-70 \times 8-11$; sporidiis ellipsoideis, utrinque rotundatis, medio 1-septatis et constrictis, levibus, hyalinis vel hyalino-brunneolis, $11-15 \times 5-7$.

Hab. in stromatibus vetustis *Melanommatis* *Cæsalpiniae* ad ramos *Cæsalpiniae* cearensis, Para America austr. (C. F. BAKER).

39. *Nectria Bakeri* Rehm, Ann. Mycol. VI (1908) p. 319. — Peritheciis gregariis, sessilibus, ovoideis, vix papillulatis, carneo-rubris, glabris, oculo nudo vix visibilibus, contextu parenchymatico flavidulo, ca. 100μ . diam.; ascis clavatis, tenerrimis, $40-42 \times 6-8$, octosporis; sporidiis ellipsoideis, medio septatis, constrictisque, utraque cellula biguttulata, hyalinis, $7-8 \times 3$, distichis; paraphysibus filiformibus, vix conspicuis.

Hab. parasitica in mycelio *Meliolæ* paginam superiorem fo-

liorum Cassiæ Hoffmannseggii incolentis, Parâ Brasiliæ (BAKER). — Subaffinis *N. viliori* et *N. pipericolæ*.

III *Lepidonectria* Sacc.

40. *Nectria chilensis* (Speg.) Sacc. et Trott., *Lepidonectria chilensis* 4911

Speg., Fungi Chilenses (1910) pag. 97, cum icon. — Peritheciis numerosis latiuscule gregariis superficialibus sublenticularibus acutiuscule papillato-ostiolatis, minutis, melleo-corneis, superne glabris, ambitu squarruloso-hirtis, 100-150 μ . diam.; ascis subclavulatis brevissime pedicellatis, aparaphysatis, 70 \times 10-12, octosporis; sporidiis oblique distichis, fusoides-navicularibus, mediocribus, 1-septato-constrictulis, grosse 2-4-guttulatis, hyalinis, 24-25 \times 4-4.5.

Hab. in pedunculis emortuis putrescentibus Lobeliæ Tupæ prope Ciudad de Valdivia, Chile Amer. austr.

41. *Nectria tremelloides* Ell. et Ev., Journ. of Myc. II (1886) p. 121. 4912

Seaver in Mycologia I (1909) pag. 53, t. V, f. 3. — Peritheciis gregariis, subglobosis, grosse furfuraceis, aurantiacis, dein pallide flavicantibus, circ. 300 μ ., prope basim mycelio parco albido cinctis; ascis clavatis, 50 \times 7; sporidiis monostichis v. supra partim biseriatis, hyalinis, fusoides, 1-septatis, levissime constrictis, 9-13 \times 3-4.

Hab. in cortice Salicis emortuæ, Louisiana, Canada (LANGLOIS).

42. *Nectria grammicospora* Ferd. et Winge, Botan. Tidsskrift XXIX 4913

(1908) pag. 11, tab. I, fig. 3. — Peritheciis stromate pulvinato, usque ad 4 mm. diam., primo immersis, dein erumpentibus, confertis, basi modo in sculptis, facile secedentibus, ellipsoideo-subglobosis, 300-350 \times 200-250, textura carnosulo-membranacea, pallide ochraceis, oculo nudo, præsertim basi, albido-furfuraceis, papilla minutissima nuda instructis; vestimento sub vitro e cellulis subrotundatis, 10-15 μ . diam., hyalinis, laxè junctis, hinc inde in squamulas quasi acervatis, composito; ascis juvenilibus fasciculatis, sursum truncatis, subsessilibus, maturis valde elongatis, indeque pedicellatis, clavatis v. oblongo-ellipsoideis, parte sporif. 35-60 \times 8.5-10; sporidiis octonis, distichis v. inferne monostichis, oblongo-ellipsoideis, utrinque rotundatis, nonnullis subinæquilateralibus, ad septum non constrictis, maturis distincte longitrorsum striatulis, 12-14 \times 5, singulatim hyalinis, gregatim brunneo-translucidis.

Hab. ad ramum corticatum in insula St. Thomas Indiæ occ. (RAUNKIAER). — Status conidiophorus *Dendrodochii* sp. sistit.

43. *Nectria subbotryosa* v. Höhnelt, *Ergeb. Bot. Exp. Südbrasil.* 1901, 4914
Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. p. 20.
Peritheciis numerosis in stromate obscure flavo gregarie insidentibus, greges 1-3 mm. long., flavo-citrinis, globosis 300-360 μ . diam., extus farinoso-squamulosis, squamulis late adnatis plerumque obtusis 65 \approx 50; paraphysibus filiformibus, numerosis; ascis clavatis, sessilibus, octosporis, 48-55 \approx 7; sporidiis submonostichis v. distichis, hyalinis, ellipsoideo-elongatis, utrinque attenuatis, obtusis, ad septum non constrictis, 12-15 \approx 4-5.

Hab. in cortice arboris emortuæ cujusdam, Jaraguaberg Sao Paulo Brasilia. — *Nectr. botryosæ* P. Henn. affinis sed differt peritheciis sporidiisque majoribus.

44. *Nectria luteo-coccinea* v. Höhnelt, *Sitzb. k. Ak. d. Wiss. Wien* 4915 CXVIII, Abt. I (1909) p. 299. — Peritheciis subgregariis v. sparsis vegetis diaphanis partim flavis partim læte rubris, globosis 2-300 μ . diam., squamulis 100 \approx 80 rubentibus v. sæpius flavis v. versicoloribus conspersis, ostiolo 44 μ . diam., papilla ex cellulis minutis concentricis formata; peritheci et squamularum contextu ex cellulis globoso-polygoniis 20 μ . diam. composito; paraphysibus paucis latiusculis; ascis clavatis sessilibus, 76-88 \approx 9-12, raro tetrasporis; sporidiis monostichis v. subdistichis ellipsoideis utrinque obtusis hyalinis plerumque quadriguttulatis obsolete uniseptatis, 10-13 \approx 5-5,5.

Hab. in ligno putrescenti in Horto bot. Buitenzorg ins. Javæ.

45. *Nectria Manihotis* Riek in Theiss. *Ann. Mycol.* (1910) pag. 459, 4916 cum ic. — Acervulis stromaticis erumpentibus, mox superficialibus, 1,5-2,5 mm. latis, 0,8-1,4 mm. cr., griseo-albidis; peritheciis stromati insidentibus, flavidulis, dense aggregatis, globoso-ellipsoideis, extus floccoso-squamulosis, 250-340 μ . diam., ipsa cavitate peritheciali c. 170-240 μ . diam. v. 220-240 \approx 160, poro pertuso; ascis cylindraceutis, breviter pedicellatis, supra rotundatis parte sp. 54-58 \approx 6,5-7,5; sporidiis ellipsoideis, hyalinis, oblique monostichis v. distichis, 4-guttulatis, septo medio delicatissimo, non constrictis, 10-13 \approx 5, utrinque angustatis.

Hab. in ramis emortuis *Manihotis* in Brasilia.

IV. *Hyphomycetia* Sacc.

46. *Nectria byssotecta* Rehm, *Ann. Mycol.* VII (1909) p. 539. — 4917
Peritheciis in maculis pseudostromaticis orbicularibus, convexulis,

3-8 mm. diam. arctissime congregatis, hyphis hyalinis, septatis, fragilibus, 4-5 μ . cr., coarctatis et obtectis, globulosis, succineis, poro vix conspicuo pertusis, 0,15 mm. diam., flavidulo-parenchymatice contextis, siccis urceolatis; ascis clavatis, tenerrimis, 65-70 \times 8-9, 8-sporis; sporidiis medio septatis, haud constrictis, utraque cellula guttas oleosas 2 magnas includente, demum ?3-septatis, hyalinis 10-12 \times 4-5, distichis; paraphysibus?

Hab. in cortice *Anacardii*, Pará Brasiliæ (C. F. BAKER). — Occurrit una cum *N. Anacardii* P. Henn.

47. *Nectria zonata* Seaver, Mycologia II (1910) p. 180, f. 1, t. XXX, 4918 fig. 1-5. — Peritheciis mycelio radiatim effuso insertis in zonas concentricas dispositis et spatium vacuum centrale relinquentibus; conidiophoris ex mycelio oriundis, verticillato-ramosis, ramulis ultimis deorsum incrassatis; conidiis catenulatis fusoideis 10-12 \times 5 intus granulosis et sæpe superficie minutissime asperulis; peritheciis copiosis pallide aurantiis v. carneis senio obscurioribus, interdum filamentis mycelii conspersis et tunc albidis; ostiolo prominulo rarius in sicco collabescente; ascis clavatis, octosporis; sporidiis distichis v. varie congestis, late fusoideis inæquilateris, uni-septatis leviter constrictis, loculo inferiore paullo angustiore, intus minute guttulatis, hyalinis 17-18 \times 8-9.

Hab. in calidariis Horti botanici New York ad ollarum superficiem, Amer. bor.

48. *Nectria æmulans* Rehm, Ann. Mycol. VII (1909) pag. 539. — 4919 Peritheciis in mycelio tenuissimo hypharum mox evanido sessilibus, plerumque arcte congregatis, primitus globosis, mox cupuliformibus, dilute flavo-albidulis, papillula minima subfusca, 0,2-0,25 mm., parenchymatice hyalino-contextis, hyphis hyalinis, subramosis, curvatis, obtusis, septatis, c. 50 \times 4 obtectis; ascis cylindraceutis 90 \times 10, octosporis; sporidiis fusiformibus, utrinque subobtusatis, rectis, medio septatis, haud constrictis, hyalinis, 14-15 \times 4-4,5, monostichis; paraphysibus nullis.

Hab. ad stipitem Filicis, Sao Leopoldo Rio Grande do Sul Brasiliæ (RICK S. J.) — *Nectria suffultæ* B. et C. affinis sed diversa. Habitus *Hypomycetis* sp.

49. *Nectria hæmatites* Syd., Deutsche Zentral-Afrika Exped. (1907-1908) II Bd. pag. 98. — Peritheciis sparsis v. sæpius gregariis, sine stromate, hemisphæricis, c. 300-500 μ . diam. levibus, sanguineis, poro minutissimo, in sicco valde collapsis et applanatis, basi hyphis amœne radiantibus usque ad 250 μ . longis et 3,5 μ . crassis in

sicco flavidis circumdati; ascis clavatis, aparaphysatis, brevissime stipitatis, 70-110 \times 10-14, octosporis; sporidiis mono-distichis, anguste ellipsoideis v. fusiformibus, medio 1-septatis, non constrictis, hyalinis, 21-28 \times 7-9.

Hab. parasitice supra Algam pleurococcaceam ad cortices, Ka-rissimbi Africæ trop.

50. *Nectria sphagnicola* Kirschst., Verh. Bot. Ver. Brandenburg 4921 XLVII (1906) p. 59. — Peritheciis plerumque solitariis et stratu albido hypharum radiantibus insidentibus, aurantiacis, globosis, demum profunde discoideo-collabescentibus; ascis cylindraceutis, supra rotundatis, breviter pedicellatis, octosporis, 50-70 \times 6-7; sporidiis monostichis, supra quandoque irregulariter dispositis, ellipsoideis, bilocularibus, non constrictis, leniter viridi-flavo tinctis, 8-11 \times 6-7; paraphysibus filiformibus; excipulo sub microscopio flavido; hyphis basi tæniæformibus et subspiraliter contortis, 3 μ . latis.

Hab. in Sphagnis in calidario Horti bot. berlinensis (P. MAGNUS).

51. *Nectria ? versicolor* (Fr. Brig.) Sacc. et Trott., *Sphæria versicolor* 4922 Fr. Briganti in Annali dell' Accad. degli aspiranti naturalisti Napoli III ser., 1 vol. (1861) p. 25, tab. I, fig. 1-4. — Peritheciis minutissimis confertis v. gregariis, subglobosis, papillatis, primo amœne virentibus, postea flavis, tandem aureis, subiculo effuso candido insidentibus; ascis et sporidiis non descriptis.

Hab. ad corticem vetustum Ficus Caricæ, Neapoli (O. G. COSTA). — Subiculum e tomento byssaceo contextum subglabratum, superficiale, confluens, sed in individuis solitariis circinatum; perithecia distincta, vix sub oculos cadentia; juniora mollia, adulta duriuscula, papillis (potius tuberculis) ope lentis vitreæ inæqualibus conspersa; sursum collabescendo umbilicata, concava; ostium prima ætate obsoletum, serius magnum et sæpius margine crenato v. angulato dehiscens (Brig. l. c.). — Stirps nectriacea videtur, sed, ignota fructificatione, omnino dubia.

V. *Lasionectria* Sacc.

52. *Nectria Elasticæ* Koord., Botan. Untersuch. (1907) p. 174, f. 12. 4923 — Peritheciis gregariis v. solitariis, superficialibus, e globoso depressis, vertice demum leviter umbilicatis, 140-190 μ . diam., stramineis v. pallide aurantiis, undique brevissime sed distincte allopilosis, pilis 12-17 μ . longis continuis v. 1-septatis, curvatis, ob-

tusis, indivisis, contextu laxiuscule cellulari, sordide stramineo, vix hyalino; ascis cylindraceo-clavatis $35-42 \times 5$, deorsum attenuatis, apice (haud incrassatis) obtusatis, 6-8-sporis, paraphysibus filiformibus paucis evanescentibusque intermixtis; sporidiis oblique monostichis vel distichis, oblongis, medio haud constrictis, curvulis $10-13 \times 2,5$ plerumque $12-13 \times 2,5$, hyalinis medio 1-septatis, utrinque obtusis v. subtruncatis.

Hab. in foliis putrescentibus plantulae Fici elasticæ cultæ in Horto bot. Berlin-Dahlem ex Java introducta cum conidiis *Colletotrichi Elasticæ* Zimm. quod forsitan status conidicus.

53. *Nectria flavo-ciliata* Seaver, Mycologia I (1909) pag. 54, tab. V 4924 fig. 11, *Nectria bicolor* Ellis et Ev. Proc. Acad. Nat. Sc. Phil. (1893) p. 443, nec *Nectria bicolor* Berk. et Br. — Syll. II, p. 487. — Peritheciis dense gregariis majusculis, 250-300 μ . diam., subglobosis, ostiolo papillato præditis, exclusa areola ostiolari, pilis obtusis, septatis, clavatis, hyalinis sursum vero aureo-sulphureis; ascis clavatis $35-40 \times 7-8$, octosporis; sporidiis distichis, fusoideis, 1-septatis, hyalinis, $8-12 \times 2,5-3$.

Hab. in ramis emortuis Caryæ, Delaware Amer. bor.

54. *Nectria lactea* Ell. et Morg. ap. Ellis et Everhart, North Amer. 4925 Pyr. p.110, Seaver in Mycologia, I (1909) p. 54, t. V, f. 5. — Peritheciis minutis 125-200 μ . diam., subglobosis gregariis v. confertis, flavidis, primo pilis densis delicatis, albis præter ostiolum tectis, indeque colorem lacteum fingentibus, demum ætate flavicantibus; pilis 2 μ . cr., extus minute granulosi, interdum vero levibus; ascis cylindraceis, octosporis, $40-50 \times 5$; sporidiis monostichis, late ellipsoideis, hyalinis, 1-septatis, $5-8 \times 3-5$, quaque cellula 1-guttata.

Hab. in fungis vetustis Polyporis, Stereis et etiam in ligno putri, New York, Ohio, Florida, Luisiana, Amer. bor.

55. *Nectria Mercurialis* Boud. — Syll. IX, pag. 969 — var. *Urticæ* 4926 Rehm, Oesterr. Bot. Ztschr. (1904) p. 87. — Ascis clavatis $50-60 \times 7-8$; sporidiis obtuse fusoideis v. oblongis, utrinque rotundatis, medio septatis, haud constrictis, utraque cellula guttas oleosas magnas 2 includente, $12-17 \times 4-5$.

Hab. ad caules siccos Urticæ dioicæ prope Neufriedenheim Baviaræ.

56. *Nectria Kickxiæ* P. Henn., Engl. Jahrb. XXXVIII (1905) p. 125. 4927 — Peritheciis subcæspitosis, subglobosis v. ovoideis, coccineis, aureo-papillatis, flavido-furfuraceis, 150-180 μ . diam., pilis flexuosis

v. apice incrassatis, septatis, flavidis, c. 30-80 \times 6-10 vestitis; ascis fusoideis octosporis, 45-60 \times 5-7; sporidiis subdistichis v. oblique monostichis, fusoideis, hyalinis, medio 1-septatis haud constrictis, 7-12 \times 2,5-3.

Hab. in ramis emortuis *Kickxiæ* elasticæ, Victoria Kamerun Africae centralis. — Quoad statum conidicum cfr. *Leptotrichum Kickxiæ*.

57. *Nectria Cannæ* (Speg.) Sacc. et Trott., *Lasionectria Cannæ* Speg., 4928 An. Mus. Nac. Buenos Aires t. XIX (1909) pag. 406. — Maculis nullis sed matrice tota nucida; peritheciis superficialibus, subglobosis, 500-750 μ . diam. siccis irregulariter corrugatis, ostiolo destitutis, melleis, vix puberulis, pilis simplicibus 30-50 \times 3-4 adpersis; ascis cylindraceo-subfusoideis breviter attenuato-pedicellatis 70-80 \times 10-12, aparaphysatis, octosporis; sporidiis ellipsoideo-subcylindraceis utrinque obtusis non septatis, 14-16 \times 5, loculis æqualibus grosse pluri-guttulatis hyalinis.

Hab. ad culmos *Cannæ* glaucæ in horto Santa Catalina pr. Buenos Aires, Argentina, America austr. — *Nectria Musce* Pat. affinis, sporidiis tamen non ovoideis recedens.

58. *Nectria placenta* von Höhnelt, *Ergeb. Bot. Exp. Südbres.* 1901, 4929 *Denk. k. Ak. d. Wiss. Wien Bd. LXXXIII* (1907) Extr. p. 19. — Peritheciis sparsis, flavo-citrinis, 620 μ . diam., 250 μ . circ. altis, lenticulari-discoideis, centro profunde umbilicatis, circum circa hyphis paucis v. numerosis patentibus in flocculos 120 \times 12-30 congestis vestitis; paraphysibus numerosis, mucosis; ascis clavatis, octosporis, 60-65 \times 8-10; sporidiis subhyalino-pallescentibus, monovel subdistichis, non constrictis, crassiuscule tunicatis, ellipsoideis utrinque rotundatis, 12-30 \times 5-6.

Hab. ad corticem arboris cujusdam, Jaraguaberg Sao Paulo Brasilia.

59. *Nectria pilosella* Rehm, *Oesterr. Bot. Ztschr.* 1904 p. 87. — 4930 Peritheciis sparsis, sessilibus, globulosis, subumbilicatis, haud papillulatis, albo-succineis, poro obscuriore, vix conspicuo pertusis, 210-240 μ . diam., pilis crebris, rectis, simplicibus, ad basim dilatatam 5 μ . cr., versus apicem plus minusve subacutatis, septatis, hyalinis, 40-60 μ . long., obsessis, parenchymatice contextis; ascis clavatis, octosporis, 50-60 \times 7-8; sporidiis fusoideis v. subclavatis, rectis, medio septatis, haud constrictis, utraque cellula guttam oleosam 1-2 includente, hyalinis, plerumque oblique monostichis, 12-14 \times 3; paraphysibus tenerrimis, septatis, 2-3 μ . cr.

Hab. ad culmum Graminis in valle Kienbach prope Andechs Bavariæ sup. — *Calonectria ochroleucæ* (Kze. et Fr.) Sacc. affinis.

60. *Nectria Henningsii* Rehm, Hedw. XXVIII (1889) p. 352. — Pe- 4931
 ritheciis sparsis vel gregariis, sessilibus, semiglobosis. siccis plerumque patellariformiter collapsis, poro vix conspicio pertusis, ceraceis, aurantiacis, contextu parenchymatico, basi hyphis hyalinis obsessis, 400-800 μ . diam; ascis clavatis, teneris, 50-80 \times 8-10, octosporis; sporidiis oblongis, apice rotundatis, rectis, bilocularibus, utraque cellula guttula oleosa magna instructis, hyalinis, distichis, 9-12 \times 4-4,5; paraphysibus parvis, ramosis, J.-

Hab. ad vaginas foliorum putridorum Musæ in palmario horti bot. regii Berolinensis (HENNING). — Ab affinibus *N. importata* Rehm, *vagabunda* Speg., *foliicola* B. et C., satis diversa.

61. *Nectria setosa* Ferd. et Winge, Botanisk Tidsskrift XXIX (1908) 4932
 pag. 11, tab. I fig. 4. — Peritheciis superficialibus, discretis vel perpaucis gregariis, initio globosis, dein applanatis siccisque pezi-zoideo-collapsis, $\frac{1}{4}$ - $\frac{1}{2}$ mm. diam; colore carneo vel aurantiaco, setis sparsis, concoloribus, rigidis, coremiiformibus, inferne crassis, sursum leniter attenuatis varieque fimbriato-divisis (conidiophoris?), usque ad 100 μ . long., præsertim parte inferiori, obsessis; ascis juvenilibus lanceolato-subfusoides, maturis cylindraceo-clavatis, 50-70 (parte spor.) \times 8-10,5, in pedicellum tenuem, mox secedentem, usque ad 20 μ . longum leniter attenuatis; sporidiis octonis, superne subdistichis, inferne plerumque monostichis, oblongo-ellipsoideis, utrinque rotundatis, ad septum non vel vix constrictis, 12-14,5 \times 5-6, hyalinis.

Hab. ad vaginas siccas Musæ (?) spec. in insula St. Thomas Indiæ occ. (RAUNKIAER).

62. *Nectria coccophila* Nomura, Noji Shikenio Hokoku (1901) p. 105 4933
 (japonice).

Hab. in Aspidioto pernicioso, in quo *scarlet disease* efficit in Japonia. — An diversa ab aliis *Nectriæ* speciebus coccogenis?

63. *Nectria Anacardii* P. Henn. in Rehm, Ascom. Exsicc. fasc. 42, 4934
 1908, n. 1781; Ann. Mycol. VI (1908) pag. 486. — (Nomen nudum).

Hab. in cortice Anacardii occidentalis, Pará Brasiliæ (BAKER).

64. *Nectria fuscidula* Rehm — var. *Menthæ* Rehm, in Strasser Verh. 4935
 zool. bot. Ges. Wien LVII (1907) p. 308. — (Nomen nudum).

Hab. in caulibus putrescentibus *Menthæ silvestris* Sonntagberg Austriæ inf.

65. *Nectria flammeola* Weese in Jaap, Verh. bot. Ver. Prov. Bran- 4936
denb. LII (1910) p. 134. — (Nomen nudum).

Hab. in cortice vetusto *Populi canadensis* prope Triglitz Germania.

66. *Nectria incrustans* Weese, in Jaap Verh. bot. Ver. Prov. Bran- 4937
denb. LII (1910) p. 134. — (Nomen nudum).

Hab. in ramulis putrescentibus *Alni glutinosæ* pr. Triglitz in Germania.

67. *Nectria consors* (Ell. et Ev.) Seaver, Mycologia I (1909) p. 61. 4938
— Ita vocanda est *Dialonectria consors* Ellis et Ev., *Nectriella consors*, Sacc. Syll. IX, p. 941, nam sporidia, teste Seaver, sunt distincte septata.

CRYPTHONECTRIA Sacc. — Syll. II p. 501, XIV p. 639, XVII p. 783.

1. *Crypthonectria Acaciarum* Spegazz., An. Mus. Nac. Buenos Aires 4939
t. XIX (1909) p. 409. — Matrice immutata; stromatibus subglobosis v. confluendo difformibus sparsis v. laxe gregariis, erumpentis superficialibus intus aurantiacis extus vix granulosus coccineis vel fusco-coccineis; peritheciis immersis globosis 100–120, flavidulis; ascis subfusoides aparaphysatis, brevissime pedicellatis, 70–85 × 10–12, octosporis; sporidiis subellipsoideis 18–22 × 6–8, ad septum non constrictis, levibus, hyalinis, grosse 1-guttulatis.

Hab. ad ramos *Acaciæ tucumanensis*, *A. ripariæ*, *A. bonariensis*, in dumetis Jujuy, Salta, Tucumán, Chaco, Misiones, Argentina Amer. austr.

NEOHENNINGSIA Koord., Botan. Untersuch. (1907) pag. 164 (Etym. *neos* novus et *Henningsia*). — Perithecia superficialia, mycelio stramineo insidentia, subglobosa, submembranacea, subhyalino-straminea, glabra, stromate destituta, apice poro minutissimo perforata, appendiculis cellulosis planis trigonis hyalino-stramineis tenuibus vestita; contextu celluloso tenui. Asci haud fasciculati, cylindracei, aparaphysati, 3–8-spori, plerumque 6–8-spori. Sporidia cylindracea, recta v. leviter curvata, hyalina, medio 1-septata. — Genus nectriaceum, nec eurotiaceum, sed ob appendiculas trigonas perithecii servari meretur. Aliæ species *Nectriæ* huc transferri debent.

1. *Neohenningsia stellulata* Koord., l. c. p. 164, fig. 8. — Peritheciis 4940

sessilibus, 200-250 latis, 90-100 μ . altis, epiphyllis, basi appendicibus stellulatis 80-120 μ . longis, cellulosi, acutis vel acutissimis; ascis 42-44 \times 5-7; sporidiis fusoideis, utrinque rotundatis v. truncatis, 1-septatis, non constrictis, 12-14 \times 2,75-3.

Hab. in foliis putrescentibus *Fici elasticæ*, Purworedjo prov. Kedu, Java, majo 1906 (KOORDERS).

2. **Neohenningsia brasiliensis** P. Henn. in Rehm, Ascom. exs. fasc. 41, 4941 n. 1761, Ann. Mycol. VI (1908) p. 119. — Peritheciis gregariis superficialibus, sessilibus, subglobosis, in sicco subcorneis, rufo-brunneis, madore tenui-membranaceis, parenchymaticis, flavidulis apice poro minuto perforatis, 140-200 μ . diam., appendicibus stellulatis (8-10) radiato-cellulosi, trigonis, obtusis, 60-80 \times 8-14 vestitis; mycelio ex hyphis flavo-fusculis, ramosis, septatis, 2-3,5 cr.; ascis cylindraneo-clavatis v. fusoideis, octosporis, 30-44 \times 5-7; sporidiis oblique monostichis v. subdistichis, cylindraceis, utrinque rotundatis, curvulis, sæpe 3-4-guttulatis, continuis (?), hyalinis, 8-15 \times 2,5-3.

Hab. in foliis *Monsterae* sp. in horto bot. Goeldiano, Pará Brasilæ (C. F. BAKER).

SPHÆROSTILBE Tul. — Syll. II p. 511, IV p. 972, XI p. 359, XVII p. 798.

1. **Sphærostilbe flavida** Massee, Bull. Miscell. Bot. Gard. Kew (1909) 4942 p. 340, cum icon. et *Diseas. cultiv. Plants and Trees* (1910) p. 190, cum ic. — Peritheciis ovatis, in cæspitulos suborbiculares dense congestis, late rubris, verruculosis, ostiolo prominulo papillato ornatis; ascis cylindraceis, sursum abrupte truncatis, 8-sporis; sporidiis hyalinis, ellipsoideis, utrinque acutatis uniseptatis, 15 \times 6-7.

Hab. in foliis vivis *Coffeæ*, quæ valde vexat et necat, morbum dictum «mancha» v. «viruela» efficiens in America centrali et Brasilia. — Status conidicus sistit *Stilbum flavidum* Cooke — Syll. IV, p. 573.

2. **Sphærostilbe Cordiæ** Rehm, Ascom. Exsicc. fasc. 42 (1908) n. 1782; 4943 Ann. Mycol. VI (1908), pag. 486. — Peritheciis in mycelio epiphyllis orbiculari, arachnoideo, plus minusve conspicuo, albidulo 2-6 arcte congregatis, sessilibus, globulosis, poro vix conspicuo pertusis, glabris, carneo-roseis, siccis umbilicato-collapsis, 0,2-0,25 mm. lat., ad basim hyphis brevibus, septatis, hyalinis, sparsis, 5-8 μ . lat. obsessis, parenchymatice flavo-contextis, plerumque in consortio *Stilbi* fungi conidiophori, erecti, cylindranei v. obovato-cla-

vati, obtusi, sæpe subfasciculati, albiduli, hirtelli, ad clavulam carneo-roseam ovatam 0,15-0,2 mm. lat., 1,2 mm. alti; ascis cylindraceis tenerrimis, sessilibus circ. $60 \approx 8$, octosporis; sporidiis oblongis, utrinque obtusis, medio septatis et valde constrictis, utraque cellula guttulis oleosis repleta, glabris, hyalinis, $10-12 \approx 5-6$, mono- interdum distichis; paraphysibus nullis; conidiis *Stilbi* singulis in basidiis hyalinis 2,5 μ . lat., sessilibus, fusoideis, utrinque acutis, rectis, unilocularibus, biguttatis, hyalinis, $9-10 \approx 3$.

Hab. ad folia Cordiæ umbraculiferæ, Parà Brasiiliæ (C. F. BAKER). — Status conidicus **Stilbum Cordiæ** (Rehm) Sacc. et Trott. dicendus.

3. **Sphærostilbe Eichelbaumiana** P. Henn., Engl. Jahrb. VXXVIII 4944 (1905) p. 112. — Caespitulis pulvinatis, c. 1-1,5 mm. diam.; peritheciis aggregatis, subconfluentibus ovoideis, papillatis, pruinosis albidis, c. 200 μ . diam.; ascis cylindraceis, obtusis, octosporis, $60-70 \approx 5-5,5$; sporidiis oblique monostichis vel subdistichis, ellipsoideis, obtusis, $8-10 \approx 4-5$, hyalinis, granulato-verrucosis, medio 1-septatis; stromatibus conidiophoris intermixtis, filiformi-clavatis, c. 350-450 ≈ 100 , capitulis hemisphaericis ceraceis, albidis, hyphis 2-2,5 μ . cr.; conidiis ellipsoideis vel subfusoideis, hyalinis, $4-5 \approx 2-2,5$.

Hab. in ramis corticatis, Amani Ost-Usambara Africae centr. (EICHELBaum). — Status conidicus **Stilbum Eichelbaumianum** (P. Henn.) Sacc. et Trott. vocandus.

4. **Sphærostilbe intermedia** Ferd. et Winge, Botan. Tidsskrift XXIX 4945 (1908) p. 12. — Stromate substrato adnato v. margine libero, pedes conidiophorum cingente iisque connato, convexo v. subplano, hypocreoides, 2-6 mm. diam., in sicco pallide carneo v. luteo-albo, ostiolis peritheciorum aurantiaco-papillato, humefacto subcinnabarino; peritheciis stromate immersis, ostiolis obtuso-conicis erumpentibus, ovoideo-subglobosis, 170-200 μ . diam., ascis lineari-cylindraceis, apice rotundatis, $70-85 \approx 5,5-7,5$, subsessilibus; sporidiis octonis, monostichis, ellipsoideis, utrinque rotundatis, nonnumquam levissime inaequalateralibus, episporio subtiliter granuloso, 1-septatis, ad septum non v. vix constrictis, $10,5-12,5 \approx 4,5-5,5$, flavidulis; conidiophoris stromati concoloribus, ad typum *Stilbi* formati, pedicello usque 1 mm. longo; capitulo subgloboso 400-600 μ . diam.; conidiis ellipsoideis, $4-8 \approx 2$, hyalinis.

Hab. ad corticem arborum in insula St. Thomas Indiae occ. (RAUNKIAER). — Inter *Sph. hypocreoidem* K. et C. et *Sph. Hen-*

ningsii F. et W. media. Status conidicus **Stilbum intermedium** (F. et W.) Sacc. et Trott. nuncupandus.

5. **Sphærostilbe ochracea** Syd., in De Wildem. Flore Bas- et Moy.- 4946
Congo t. III, fasc. I (1909) Extr. p. 15. — Peritheciis plerumque
caespitosis, 3-15 dense aggregatis, subglobosis, 200-275 μ . diam.,
dein centro collabescentibus, minutissime papillulatis, leniter ru-
gulosus, ochraceis; ascis cylindraceis, obtusis, 55-70 \approx 4-5,5, octo-
sporis; sporidiis monostichis, ellipsoideis, subinde oblongis, utrinque
rotundatis v. leniter attenuatis, medio septatis, non constrictis,
hyalinis, 10-16 \approx 3,5-4,5; fasciculis conidiophoris filiformibus, ri-
gidis 1200 μ . long., 100-130 μ . cr., apice usque ad 300 μ . cr., gri-
seis; conidiis ellipsoideo-oblongis, hyalinis 3-5 \approx 2.

Hab. in corticibus, Kisanu Congo Afr. trop. (VANDERYST).

6. **Sphærostilbe Henningsii** Ferdin. et Winge, Botanisk Tidsskrift 4947
XIX (1908) pag. 12. — Ita nuncupanda *Sph. hypocreoides* P.
Henn. 1902 — Syll. XVII, p. 798 — nec Kalchbrenner et Cooke
1880 — Syll. II, p. 515. — Status conidicus **Stilbum Vanderysti**
Sacc. et Trott. dicendus.

HYPOCREA Fr. — Syll. II p. 520, IX p. 972, XI p. 361, XIV
p. 641, XVI p. 583, XVII p. 800.

1. **Hypocrea argentinensis** Speg., An. Mus. Nac. Buenos Aires t. XIX 4948
(1909) p. 409. — Stromatibus majusculis pezizoideis primo cupu-
latis dein convexo-expansis, sordide flavescentibus intus albis; pe-
ritheciis non prominulis, globosis 90-120 μ . diam., obsoletissime
papillato-ostiolatis; ascis cylindraceis, basi breviter attenuato-pedi-
cellatis, 80-100 \approx 5, octosporis, aparaphysatis; sporidiis primo elli-
psoideis 10-11 \approx 5, tunica externa cito diffuente ac loculos e glo-
bosos subovatos 4-5 \approx 4, hyalinos grosse uniguttulatos liberante
donatis.

Hab. ad ramos dejectos putrescentes Patagonulæ ameri-
canæ in silvis secus Rio San Francisco, Jujuy, Rep. Argentina
Amer. austr.

2. **Hypocrea bambusella** v. Höhnelt, Ergeb. Bot. Exp. Südbras. 1901 4949
Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. p. 20.
Stromate depresso, indistincte limitato, sicco sæpe margine incur-
vato, rotundato v. elongato, pallide flavo-ochraceo, 1-3 mm. long.,
200-250 μ . cr., ostiolis peritheciolorum brunneis, sæpe laxè v. arcte
seriatim dispositis, punctulata; contextu pallido; peritheciis globo-
sis, omnino immersis, papillato-ostiolatis, 160 \approx 120; ascis nume-

rosis, cylindraceis, $60 \times 3-4$, octosporis, paraphysibus filiformibus obsitis; sporidiis monostichis, hyalinis, in 16 loculos sæpe subcuboideos v. ovoideos $2-4 \times 2-3$, secedentibus.

Hab. in culmo putri Bambusæ, ad flumen Rio Pardo in districtu S. Cruz Sao Paulo Brasilia.

3. *Hypocrea flavo-miniata* Bres. in Theiss., Ann. Mycol. (1910) p. 457. 4950

— Stromate indefinito, irregulari, 0,5-0,6 mm. v. usque ad 1 mm. crasso, obscure et sordide flavido sed nigro punctato-ostiolato, intus e minio sanguineo colorato; strato hyphali peripherico 80-100 μ . cr., obscure rubro et perithecia obtegente; peritheciis laxiusculis 280-380 μ . cr.; ascis cylindraceis $90-150 \times 5$; sporidiis $10-12,5 \times 4$, loculo superiori globoso-ellipsoideo, inferiori subcuboideo, constrictis, jam in asco secedentibus.

Hab. in ligneo corticato arborum Brasiliæ.

4. *Hypocrea turbinata* Starb., Ascom. Schwed. Chaco-Cordill. Exp., 4951

Ark. f. Bot. Bd. V (1905) p. 11, fig. 7, a-c. — Stromatibus dense gregariis, superficialibus, basi matrice insculptis, crasse discoideis vel discoideo-turbinatis, disco dilatato, mutua pressione undulatim vel polygone, rarius orbiculariter determinato, superficie inæqualiter rugoso vel plicato, obscure cerino, basim versus perpauillum flocculosis, pallide flavescentibus vel fere albidis, 0,5-2 mm. latis, sæpe usque ad 2 mm. latis, sæpe usque ad 2 mm. altis; peritheciis numerosis, stromate plane immersis, sphæroideis, vertice paulum convexulis, 150-200 μ . diam.; ascis octosporis, cylindraceis, sursum truncatis, deorsum longiuscule pedicellatis, circa $100 \times 6,5$; sporidiis monostichis, bilocularibus, articulis varia forma, plerumque globoso-cuboideis, interdum fere rhombiformibus vel conico-cylindraceis, superiore sæpe ellipsoideo-cylindraceo, $5-6,3 \times 3,8-5$, inferiore sphæroideo 4-5 μ . diam., obscure olivaceis, uniguttulatis; paraphysibus nullis; textura stromatis intricata, hyphis crassis, turgidis, ramosis, flexuosis, composita; parietum perithecorum subparenchymatica.

Hab. ad truncos, Serra da Chapada, Buriti, Matto Grosso Brasiliæ (MALME). — Forma stromatum insignis species vix ulli adhuc descriptæ affinis.

5. *Hypocrea subsulphurea* Syd., in De Wildem., Flore Bas.-et Moy- 4952

Congo t. III, fasc. I (1909) pag. 15. — Stromatibus tenuissimis, effusis, membranaceo-adnatis, usque ad 3 cm. longis, citrino-sulphureis, margine glabris; peritheciis crebris, omnino immersis, globulosis, luteo-rufis, 120-180 μ . diam.; ascis cylindraceis, brevis-

sime stipitatis, aparaphysatis, 75-100 \times 4-5, octosporis; sporidiis didymis, articulis globoso-cuboideis, subæqualibus, 3-4,5 μ . diam., hyalinis.

Hab. ad truncos, Kisanu Congo, Afr. trop. (VANDERYST). —

Hypocr. sulphureæ proxima.

6. *Hypocrea simplicissima* Rick et Theiss., Ann. mycol. (1907) p. 457, 4958 f. 1-4. — Stromatibus simplicibus; peritheciis piriformibus, minutis, 250-340 \times 250-300, rubro-brunneis, ætate brunneo-atris, levibus, purpuraceis, siccis rugulosulis, dense gregariis vel plus minusve discretis, poris matricis immediate insidentibus, nectrioideis, poro minutissimo pertusis; ascis anguste cylindraceis, breviter pedicellatis, p. sp. 58-64 \times 4, octosporis; sporidiis hypocreoides, hyalinis, 6-8 \times 3, uniseptatis, subconstrictis, cellulis ad morem *Hypocreæ* inæqualibus, in asco secedentibus.

Hab. supra poros *Trametis ochroflavæ*, Petropolis Rio Grande do Sul Brasiliæ (J. RICK). — Pro hac specie conditur subg. *Haplocrea* Rick et Theiss., l. c. his notis: Perithecia distincta, stromate fere nullo excepta; asci cylindrici, sporidia octona bilocularia, mox secedendo 16.

7. *Hypocrea fragarioides* P. Henn., Engl. Jahrb. XXXVIII (1905) 4954 p. 112. — Stromatibus subgloboso-pulvinatis, subcoccineis, 1,5-3 mm. diam., fragariiformibus; peritheciis subliberis, hemisphæricis v. ovoideis, papillatis, c. 180 \times 150; ascis cylindraceo-filiformibus, c. 80-95 \times 2,5-5; sporidiorum cellulis 16 subcuboideis, hyalino-flavidulis, 2,5-3,5 \times 2,5-3.

Hab. in ligno putri, Amani, Usambara occ. Africæ centr. (ERCHELBAUM).

8. *Hypocrea fungicola* Karst. — Syll. II, p. 528 — f. *Raduli* v. Höhn. 4955 in Rehm, Ann. Myc. III (1905) p. 227, Ascom. Exsicc. fasc. 34, n. 1588 (nomen nudum).

Hab. in *Radulo Kmetii* Bres., prope Tulln Austriæ inf. (v. HÖHNEL).

9. *Hypocrea grisea* Rick, Broteria V (1906) p. 43. — Stromate glo- 4956 boso, gregario, depresso, 5 mm. diam., areolato, furfure griseo tecto, intus viridulo; peritheciis $\frac{1}{5}$ mm. diam., ostiolo producto, subviridulo; ascis 80-100 \times 6, membrana tenui, vix pedicellatis; sporidiis oblongis, uniserialibus, 6-10 \times 5, medio septatis, constrictis, saturate fuligineis, denique in 16 articulos separatis.

Hab. in *Polyporo ? cubensi* vetusto, Rio Grande do Sul Brasiliæ.

CLINTONIELLA Sacc. — Syll. II p. 532, XIV p. 645, XVI p. 588.

1. *Clintoniella incarnata* (Pat. et Har.) Sacc. et Trott., *Hypocrea in-* 4957
carnata Pat. et Har., Bull. Soc. Mycol. de France XXII (1906)
p. 120. — Stromate effuso, planiusculo, sparso v. confluenti, cras-
siusculo, 2-8 mm. lato, carnosulo, suborbiculari, albido, dein in-
carnato, ex ostioliis peritheciolorum, crebre punctato; peritheciis in-
natis, ovoideis, circiter 250 μ . diam.; ascis cylindraceutis, brevissime
stipitatis, 75-90 \times 7-9, octosporis; sporidiis monostichis, ovalibus,
medio uniseptatis, non constrictis, minutissime punctulatis, hyali-
nis, 10-13 \times 5-6.

Hab. ad corticem ramorum, Samoa (LLOYD).

PODOCREA Sacc. — Syll. II p. 530, XIV p. 645, XVI p. 587,
XVII p. 799.

1. *Podocrea Solmsii* (Fisch.) Sacc. et Trott., *Hypocrea Solmsii* Fisch. 4958
— Syll. IX, p. 979 — var. *corniformis* Bresadola, Ann. Mycol.
V (1907) p. 241. — Stromate simplici, corniformi, 10 cm. longo,
1 cm. crasso, apice obtuso, cervino, tereti, hic illic lacunoso; ascis
100-110 \times 5-6, jodo —; paraphysibus septatis, 3 μ . crassis; articulis
sporarum cuboideis, demum subasperulis, superiori 6-6 $\frac{1}{2}$ \times 4-5 $\frac{1}{2}$,
inferiori 4 $\frac{1}{2}$ -5 \times 4 $\frac{1}{2}$ -5.

Hab. ad ligna in ins. Java (HEINRICHER). — A typo differt forma
simplici, regulari, valde elongata, exacte corniformi et sporis cu-
boideo-diffractis, non 1-septatis uti in icone Fischerii delineatur.

2. *Podocrea alutacea* (Pers.) Lind. Pflanzenfam. Pilze I, pag. 364, 4959
Hypocrea alutacea (Pers.) Ces. et De Not. — Syll. II, p. 530. —
Teste cl. Atkinson, Bot. Gaz. Dec. 1905 aliisque mycologis, species
non est parasitica in *Clavaria* et *Spathularia* sed sic dicta matrix
est genuinum ejus stroma clavariforme, hinc vera *Podocrea*.

STILBOCREA Pat. — Syll. XVI p. 588.

1. *Stilbocrea macrostoma* (B. et C.) v. Höhn. Fragm. Mykol. VIII, 4960
p. 29. — Ita vocanda est *Nectria macrostoma* B. et C. — Syll.
II, p. 506 — cujus syn. esset *Stilbocrea Dussii* Pat. — Syll. XVI,
p. 588, teste v. Höhn.

HYPOMYCES Fr. — Syll. II p. 466, IX p. 954, XI p. 356, XIV
p. 641, XVI p. 582, XVII p. 803.

1. *Hypomyces niveus* P. Henn., in Voeltzkow Reise Ostafrika III 4961
(1908) p. 28, taf. III, f. 19. — Peritheciis sparsis, subglobosis v.

subovoideis in sicco collabentibus, tenui-membranaceis, niveis, obtuse ostiolatis, basi hyphis hyalinis laxè fasciculatis 3-4 μ . cr. circumdatis, 130-150 μ .; ascis cylindræo-clavatis, obtusis, octosporis, 40-58 \times 3-3,5; sporidiis oblique monostichis, oblongo-ovoideis, uniseptatis haud constrictis, hyalinis intus granulosi, 6,5-8 \times 2,5-3,5.

Hab. ad Polyporum sp., Fénérive Madagascar. — *H. candidanti* Plow. affinis sed peritheciis, sporidiis non constrictis, matrice etc. distinctus.

2. **Hypomyces australiensis** v. Höhn. Sitzb. k. Ak. d. Wiss. Wien 4962 CXVIII, Abt. I (1909) pag. 294. — Stromate tenui membranaceo glabro, sordide aurantiaco hinc inde violaceo v. carneo-maculato ex hyphis laxis hyalinis 3-4 rarius -8 μ . cr. formato; peritheciis immersis, sparsis, globoso-applanatis aurantiis, ostiolo obtuse conico demum collabescendo discoideo, 80 \times 65 præditis, 250 μ . diam., tenui-membranaceis; paraphysibus nullis; ascis cylindricis 90 \times 5; sporidiis monostichis, octonis, fusoideis, utrinque acutis, granulosi, hyalinis v. dilute luteolis, 12-16 \times 4-5.

Hab. in subiculo fungino albo quodam, corticem levem arboris obducente, Barrow-River Australiae (PRITZEL). — *Hypomyceti chromatico* peraffinis.

3. **Hypomyces javanicus** von Höhn. Sitzb. k. Ak. d. Wiss. Wien 4963 CXVIII, Abt. I (1909) p. 293, Rehm, Ascom. exs. fasc. 44, n. 1849. — Stromate arachnoideo non membranaceo, inconspicuo plerumque elongato 1 cm. c. longo, læte flavo-aurantiaco, ex hyphis tenuibus 2-3 μ . cr. formato; peritheciis sparsis subinde duobus v. pluribus connatis, aurantiacis infra pallidioribus, ovoideis, contextu tenui celluloso, apice in ostiolum, 50-80 \times 60, obtuse conicum desinentibus, 260 \times 200; ascis cylindricis 100 \times 6-7 paraphysibus obsoletis; sporidiis octonis monostichis fusoideis utrinque acutis, flavidis, granulosi plerumque rectis, 15-18 \times 5,5-6,5.

Hab. in hymenio Polystichi elongati in silvis Tijbodas ins. Javæ. — Cum *Hypom. chromatico* et *boleticola* imperfecte notis forte identicus.

4. **Hypomyces Leotiarum** Fayod in Ann. Sc. nat. sér. VII, 2 (1885) 4964 pag. 49, t III, f. 9-12. — Peritheciis hucusque ignotis; mycelii hyphis perangustis, sæpe bifurcatis, crebro septatis; conidiis in apice ramulorum nascentibus fusoideis, rectis, utrinque acutis, 9-12 \times 2,5-3, subhyalinis, intus granulosi; chlamydosporis breviter pedicellatis, initio subpiriformibus dein globosis, bitunicatis, tunica interna crassissima, atro-viridibus, 18-20 μ . diam., levibus;

pedicello (seu articulo inferiore) in sporam sensim dilatato, eaque brevior, tenuiter 1-tunicato, hyalino.

Hab. in toto ascomate *Leotia* lubricæ, quæ non deformatur sed colorem omnino peculiarem viridem ex parasita induit, in al-
pibus Vallesiacis et verisimiliter alibi. — *Leotia atro-virens* Pers.,
observante cl. Fayod, est probabiliter *Leotia lubrica* mycete invasa.

5. **Hypomyces Psiloti** Bernátsky in Termész. Füzet. XXII (1899) 4965
Species quoad genus omnino incerta. p. 107, t. 6-7. — Peritheciis
globosis, sursum obtuse conoideis, flavo-brunneis; contextus cel-
lulis minutis, 6 μ . cr., non prominentibus; ascis clavatis (non li-
nearibus) octosporis; sporidiis in parte asci latiore sitis, fusiformi-
bus, 8-12 \approx 3, tenuiter tunicatis, levibus, contentu hyalino.

Hab. in truncis *Psiloti triquetri* culti in Rossia. — Teste
cl. Bernátsky *Nectria Vandæ* Wahrl. — Syll. IX, p. 968 — et
N. Goroshankiana Wahrl. sint dicendæ *Hypomyces Vandæ* et *H.*
Goroshankianus Bern. l. c.

6. **Hypomyces Trichoderma** (Hoffm.) Sacc. — var. **Schorsteini** Bres., 4966
Fungi gall., Ann. Myc. v. VI (1908) p. 47 — Syll. II, p. 475,
XI, pag. 357. — Subiculo corticioideo, luride cinereo, ex hyphis
septatis, 4-9 μ . crassis composito; peritheciis subglobosis basi tan-
tum in subiculo nidulantibus, flavidis, nigricantibus, contextu sub-
parenchymatico, 270-300 μ . altis, 240-250 μ . crassis, ostiolo majus-
culo, a perithecio basi contracta clare distincto, 100-120 μ . alto,
90-105 μ . lato, pulchre violaceo, contextu e cellulis transverse ob-
longis conflato; ascis cylindræo-subclavatis 90-95 \approx 5-6; sporidiis
hyalinis, fusoideis, 1-septatis, utrinque appendiculatis, 22-24 \approx 4.

Hab. ad asseres quercinos in ducto vaporario, Florisdorf pr.
Vindobonam Austriæ (Archit. J. SCHORSTEIN). — Species hæc pa-
rum est cognita et ab auctoribus de ostiolo violaceo non fit sermo,
ideoque ceu varietatem fungum nostrum admisimus; forte tamen
hæc nota prætervisa, quia nisi ope microscopii conspicitur (Bre-
sadola l. c.).

7. **Hypomyces Hyacinthi** Sorauer, Handb. Pflanzenkr. 2 Aufl. II 4967
(1886) p. 100, tab. V. — Peritheciis piriformibus 300-450 μ . alt.,
160-220 μ . cr., gregariis confertisque maturis rubro-sanguineis;
ascis cylindræis 60-100 μ . long., tetrasporis vel octosporis, basi
angustatis irregulariter inflatis; sporidiis oblique monostichis elli-
psoideis uniseptatis, 10-18 \approx 4-8, medio constrictis.

Hab. in bulbis *Hyacinthi* culti in Germania. — *Hyp. Solani*
affinis sed diversa sporidiis levibus nec non aliis characteribus

ejusdem formarum inferiorum quæ sunt e genere *Fusisporii* et *Sepedonii*.

LISEA Sacc. — Syll. II p. 517, XI p. 360, XIV p. 640, XVI p. 581, XVII p. 806.

1. *Lisea parasitica* Rick, Broteria V (1906) pag. 41. — Peritheciis 4968 minutis, 50 μ . diam., gregariis, viridulo-hyalinis, denique obscure violaceis, primitus bysso tenui et alba insidentibus; ascis 38-50 \times 6-7,5, octosporis; sporidiis cylindræis 6-7,5 \times 3, uniseptatis, ad vix constrictis, hyalinis, denique viridulis; paraphysibus septum nullis.

Hab. in Hypoxylo enteroleuco Speg. parasitans, quod totum commutat, Rio Grande do Sul Brasilæ. — An *Balzania* Speg. huc pertinet?

2. *Lisea verrucosa* Starb., Ascom. Schwed. Chaco-Cordill. Exp. Ar- 4969
kiv f. Bot. Bd. V (1905) p. 9. — Peritheciis solitariis vel sæpius in acervulis longitudinalibus, seriatim erumpentibus aggregatis, primo globulosis, deinde cylindræo-conoideis et mutua pressione difformibus, interdum fere turbinatis atque manifeste rugoso-verruculosis, vix papillulatis, demum poro lato pertusis, atris, contra lucem amœne cæruleo-violaceis, vetustioribus fuligineo-violaceis, textura mollissima, hypocreacea, cellulis 6-20 μ . diam., ad basim hyphis cyaneo-fuligineis parce cinctis, 100-175 μ . diam.; ascis octosporis, cylindræis vel cylindræo-clavatis, fere sessilibus, sursum obtuse truncatulis, 75-90 \times 7,5-9; sporidiis monostichis vel superioribus distichis, ellipsoideis vel ellipsoideo-fusoideis, utrinque obtusiusculis, primo 4-guttulatis, demum (quod e germinantibus liquet) medio septatis, interdum constrictis, rarissime 3-septatis, hyalinis; paraphysibus nullis vel mox diffluentibus.

Hab. in caulibus Equiseti una cum *Nectria lophiostomaceæ* Starb. in Prov. Jujuy, Quinta pr. Laguna de la Brea, Argentina. — Ab aliis speciebus *Liseæ* peritheciis rugoso-verruculosis, a *Giberellis* sporidiis typice 1-septatis differre videtur.

VALSONECTRIA Spegazz. — Syll. II p. 519, XIV p. 645. — Quoad *Valsonectria parasitica* (Murr.) Rehm, cfr. *Endothia gyrosa*, supra.

1. *Valsonectria Boldoæ* Speg., Fungi Chilenses (1910) pag. 98, cum 4970 icon. — Stromatibus cortice innatis erumpentibus parvis aureis subpulverulentis; peritheciis paucis (2-5) circumstantibus subglobosis carnosulis, fusco-luteolis, ostioliis brevibus cylindræis obscurioribus

conniventibus non v. vix exertis coronatis, 150-180 μ . diam.; ascis clavulatis aparaphysatis longiuscule attenuato-pedicellatis, 70 \approx 6, octosporis; sporidiis parvis botuliformibus utrinque minute 1-guttulatis, leniter chlorinis, 8-12 \approx 2.

Hab. in ramulis emortuis Boldoæ fragrantis prope Talcahuano Chile Amer. austr.

Sect. 5. Phæodidymæ.

LETENDRÆA Sacc. — Syll. II p. 538, XIV p. 646.

1. *Letendræa rhynchostoma* v. Höhnelt, Fragm. z. Mykol. Sitzb. k. 4971 Ak. d. Wissensch. Wien Bd. CXVI, Abt. I (1907) pag. 108. — Peritheciis gregariis, superficialibus, levibus, circ. 400 μ . cr., rotundatis, ovoideis, rostello usque ad 200 μ . cr. apice transverse truncato, nunc brevi nunc usque ad 700 μ . longo præditis, brunneo-flavis, tenui-membranaceis, contextu flavo parenchymatico; apice rostelli obscure brunneo; paraphysibus filiformibus, numerosis ascos longitudine superantibus; ascis tenuissime tunicatis octosporis, cylindraceis, 85-100 \approx 8-10; sporidiis monostichis primum cyaneis, dein nigris, elongato-fusoideis et plus minus curvis lunulatis, utrinque obtusis, minute biguttulatis, demum bilocularibus (loculis sæpe inæqualibus), 11-17 \approx 6-7.

Hab. in endocarpio putri Juglandis regiæ, Prater prope Wien Austriæ inf.

2. *Letendræa bahiensis* Spegazz., Micromycetas de los Cacaoyeros, 4972 Rev. Facult. Agronom. y Veter., t. II, La Plata (1906) nn. 4-6, pag. 307, fig. D. — Subiculo (an heterogeneo?) superficiali, arcte matrici adnato submembranaceo compactiusculo tenui, ambitu repandulo sensim attenuato-evanescente, albescenti subcinerescente, ex hyphis gracilibus, 3-4 μ . cr., crebre ramulosis septatisque dense intertextis hyalinis efformato; peritheciis subiculo plus minusve infossis, rarius plane superficialibus, sparsis depresso-globulosis, parvis, 120-180 μ . diam., glabris, astomis (?), primo albidis dein flavidulis postremo lateritiis, membranaceis carnosulis, contextu melleo indistincto; ascis subfusoideo-cylindraceis antice obtuse rotundatis postice brevissime crassiusculeque pedicellatis, 70-80 \approx 12-14, aparaphysatis; sporidiis rectis v. oblique distichis, elliptico-elongatis, 20 \approx 7, rectis vel leniter inæquilateralibus, medio 1-septatis, ad septum constrictis, fuligineis, subopacis.

Hab. in trunco *Theobromæ Cacao*, Bahia de todos los Santos Brasilia (HEMPEL).

3. *Letendræa epixylaria* Rick., in Ann. Mycol. III, p. 239 (1905). — 4978

Peritheciis gregariis depresso-orbicularibus, ostiolatis, fusco-atris, contextu nectrioideo, $\frac{2}{3}$ mm. latis, subiculo brunneo, laxo insidentibus, superne glabris, nitidis; ascis pedicellatis, linearibus, ca. 50 μ . longis (parte sporif.), 3-4 μ . latis, octosporis; sporidiis cylindraceo-rectangularibus bilocularibus, uniserialibus, loculis subinæqualibus, septo crasso formatis, 6-8 μ . longis, 3-4 μ . latis, brunneis; paraphysibus multis, filiformibus, plerumque simplicibus.

Hab. in pedunculo *Xylariæ pedunculatæ*, perithecia *Xylariæ* imitans, Rio Grande do Sul Brasiliæ.

NEOSKOFITZIA Schultz. — Syll. IX p. 981.

1. *Neoskofitzia Termitum* von Höhnelt, Sitzb. k. Ak. d. Wiss. Wien 4974

CXVII (1908) Abt. I p. 998. — Peritheciis liberis, stromate destitutis, superficialibus, solitariis v. plus minus gregariis, primum sublateralitibus dein sordide brunneis, globosis, 300-400 μ . diam., minute ostiolato-papillatis; contextu parenchymatico e cellulis 40 μ . lat. tenuiter tunicatis constituto; paraphysibus nullis v. indistinctis; ascis numerosis, plerumque cylindraceis, 16-sporis tenuibus, $44 \approx 4$; sporidiis plerumque monostichis, subovoideis, flavido-griseo-olivaceis, geminatis, 3-3,5 μ . cr.

Hab. ad nidos *Termitum*, Buitenzorg et Tjibodas in ins. Java.

2. *Neoskofitzia hypomycoides* Rick, in Ann. Myc. III (1905) p. 239 4975

— Peritheciis aggregatis, liberis, in mycelio mucedineo, griseo-cinereo insidentibus, globoso-ovatis, ostiolo acuto, sordide luteis, $\frac{1}{2}$ mm. latis, primitus hirsutulis, dein minutissime scabrosis; ascis linearibus, 60-70 μ . longis, 3-4 μ . latis, octosporis; sporidiis bicellularibus, mox in 16 articulos secedentibus; articulis globoso-rectangularibus, 3-5 μ . diam., hyalinis vel subhyalinis.

Hab. in *Polyporo* vetusto, Rio Grande do Sul, Brasilia.

PHÆONECTRIA Sacc. — Syll. XI p. 359, XVI p. 580, XVII p. 796 (ut subgen.), *Macbridella* Seaver, Mycol. I (1909) p. 195.

1. *Phæonectria olivacea* (Seaver) Sacc. et Trott., *Macbridella olivacea* 4976

Seaver, Mycologia II (1910) pag. 178, tab. XXX, fig. 6-13. — Stromatibus erumpentibus centro potius compactis, extus conidiophoris ramosis, numerosis, floccosis, albis dein rubentibus 1 μ . cr. conspersis, sparsis v. confluentibus; conidiophoris verticillato-ra-

mosis; conidiis catenulatis, ellipsoideis, $5-6 \approx 4-5$; peritheciis cæspitosis in stromate insertis v. circum positis, obscure rubentibus, granulis olivaceis conspersis et tunc cæspitulos atro-virentes red-dentibus; ascis cylindricis, octosporis; sporidiis monostichis, imbricatis, fusoideis v. ellipsoideis, hyalinis et muco diaphano obvolutis, 1-septatis, dein olivaceis v. fumoso-brunneis, septoque constrictulis, longitudinaliter obsolete striatis, biguttulatis, $12-15 \approx 8$.

Hab. ad stipites Palmæ cujusdam, Montzorongo Mexico (W. A. MURRILL).

LOJKANIA Rehm, Contr. mycol. Hung. (Növ. Kozlem. IV (1905) p. 2 (Etym. a cl. lichenologo hungarico H. LOJKA). — Perithecia membranacea, stromate superficiali ex hyphis fuscis ramosissimis, arctissime complexis formato, extus levigato, haud carbonaceo gregarie innata, fusca, papillula minima prominentia. Asci cylindracei, 8-spori. Sporidia fusiformia, medio septata, primitus hyalina, dein subfusca, 1-sticha. Paraphyses filiformes. — Stromate haud carbonaceo nec crustaceo superficiali a generibus stromaticis cum sporis phæodidymis plane diversum genus, imprimis a *Camarope* Karst., cujus stroma e substantia substrati formatum extus *Hypoxyla* similis stromate, sporis et peritheciis alienum; proximum *Neopeckia* Sacc., quæ autem peritheciis carbonaceis superficialibus, subiculo copioso interdum semiimmersis gaudet, stromate vero caret. — Quoad peritheci structurem membranaceam, mollem ad *Hypocreales* propius vergit ibique forsitan sub *Hypomyceteis* aptissime locandum est (Rehm l. c.).

1. *Lojkania hungarica* Rehm, l. c. p. 2. — Peritheciis in plagis superficialibus, 1-2 cm. lat., stroma late diffusum, subæquale, 1 mm. cr., extus albidulum itemque marginatum, levigatum, intus fusconigrum, molle formantibus, gregarie innatis, globosis, minute papillulatis, demum poro conspicuo pertusis, 0,4 mm. diam., contextu parenchymatico fusco, crustam obtegentem atro-inquinatam subelevantibus, haud carbonaceis, subiculo denso hypharum ramosissimarum, longissimarum, fuscicularum, septatarum, 3-5 μ . cr. obductis et conjunctis; ascis cylindraceutis, apice rotundatis, crasse tunicatis, c. 200 \approx 12-15, octosporis; sporidiis fusiformibus, utrinque subacutatis, medio septatis, vix constrictis, primitus hyalinis, demum fuscis, utraque cellula guttis 2 magnis oleosis prædita, retis, 25-30 \approx 9-10, 1-stichis; paraphysibus filiformibus, 2 μ . crassis, septatis.

Hab. ad lignum in balneo sæpe inundatum, P.-Szentgyörgy, Hungariæ (Dr. ZAHLBRUCKNER). — A *Neopeckia Coulteri* et *N. diffusa* rite distincta.

Sect. 5. Hyalophragmiæ.

CESATIELLA Sacc. — Syll. II p. 557, XVII p. 808.

1. *Cesatiella polyphragmospora* Da Camara, Mycetæ aliquot Theobromæ Cacao in Sancti-Thomensi Insula, Lisboa (1910) p. 3, t. III, fig. 6-9. — Peritheciis immersis, sparsis, globosis, melleis ostiolo minuto pertusoque, 300-450 μ . diam.; ascis octosporis, cylindraceis, cylindraceo-clavulatis v. inflatis, brevi-stipitatis, apice rotundatis, 130-150 \times 15-18; paraphysibus numerosis, filiformibus, longis pluriguttulatisque; sporidiis distichis, oblongo-ellipsoideis, nubilosis, hyalinis, plerumque septem v. raro octoseptatis, plus minus falcatis, utrinque rotundatis, non constrictis, 50-60 \times 10-12.

Hab. in cortice Theobromæ Cacao in ins. S. Thomé (J. J. DE ALMEIDA et CANNAS MENDES).

CALONECTRIA De Not. — Syll. II p. 540, IX p. 982, XI p. 363, XIV p. 647, XVI p. 593, 1141, XVII p. 809.

1. *Calonectria tetraspora* (Seaver) Sacc. et Trott., *Scoleconectria tetraspora* Seaver in North Am. Fl. III, pt. 1 (1910) pag. 27. — Peritheciis in cæspitulos 0,5-2 mm. diam. dense confertis, hypostromate indistincto insertis, superficialibus, globosis v. subglobosis, ostiolo subinde collabescente præditis, extus conspicue albido-furfuraceis et tunc habitum verrucosam fingentibus, pallide aurantiacis, 250-300 μ . diam.; ascis late clavatis, 70-80 \times 10-12, tetrasporis; sporidiis monostichis v. in centro ascis subconfertis, apicibus superimpositis, ellipsoideis utrinque tenuatis, rectis curvulisve, hyalinis, intus granulosus, distincte 3-septatis, 25-28 \times 8-10.

Hab. in truncis Theobromæ Cacao, Port Maria Jamaica (EARLE).

2. *Calonectria Rehmiana* Kirschst., Verh. Bot. Ver. Brandenburg XLVIII (1906) p. 59. — Peritheciis e stromate flavido, rotundato v. elongato, immerso orientibus, primum globosis, dein discoideo-collabescentibus, membranaceis, primum pallide brunneis demum nigris; excipulo grosse parenchymatico; ascis clavatis, breviter pedicellatis, tenuissimis, octosporis, 80-90 \times 12-14; sporidiis supra

distichis infra monostichis, hyalinis, plerumque fusoides utrinque rotundatis, sed etiam subcylindræis v. subclavatis, quadrilocularibus, ad septa quandoque constrictulis, rectis v. leniter curvulis, 20-30 \approx 6-8.

Hab. in ramulis Corni sanguineæ prope Gross-Behritz Germaniæ.

3. *Calonectria bahiensis* Hempel, Bol. Agric. Sao Paulo, V ser. (1904) 4981 n. 1 p. 22.

Hab. in cortice Theobromæ Cacao, Bahia in Brasilia. — Exemplaria obsoleta, imperfecta observata. Crustas irregulares, laticas, atras in cortice format.

4. *Calonectria rubro-punctata* Rehm, Ann. Mycol. VII (1909) p. 539. 4982 — Peritheciis in hypophyllo singulis, maculis orbicularibus rubellis c. 0,5 mm. diam., innatis, globoso-conoideis, ferrugineis, glabris, parenchymatice tenuiter rubro-fusco contextis, papillula prominente, 0,2 mm. diam.; ascis oblongo-cylindræis, apice rotundatis, 60-65 \approx 9, 8-sporis; sporidiis fusiformibus, utrinque acutatis, 4-cellularibus, hyalinis, 12-15 \approx 3, distichis; paraphysibus teneris, subramosis.

Hab. in hypophyllo folii Eugeniæ bagensis, Sao Leopoldo Rio Grande do Sul Brasiliæ (THEISSEN S. J.) — *Calonectria transeunti* similis.

5. *Calonectria pachythrix* Rehm, Ann. Mycol. V (1907) p. 531. — 4983 Peritheciis in mycelio longe lateque effuso, pallide flavo-albello, tenuissime membranaceo-parenchymatico gregarie sessilibus, globulosis, apice plerumque umbilicatis, 300-350 μ . diam., flavido-albellis vel flavido-succineis, contextu parenchymatico e cellulis polyedricis magnis conflato, pilis sparsis rectis, obtusis, ad basim dilatatis, 2-3 cellularibus, hyalinis, crasse tunicatis, 60-100 \approx ad basim 10-12 μ . cr., obsessis; ascis oblongis, apice rotundatis, sessilibus, c. 90 \approx 12, octosporis; sporidiis fusoides-oblongis, utrinque subacutatis, rectis, primitus granulis minutissimis repletis, demum 4-cellularibus, hyalinis 40 \approx 4-5, di-tristichis; paraphysibus filiformibus, 2-3 μ . cr., hyalinis.

Hab. ad ramulos Rubi, Sao Francisco dos Campos, Sao Paulo Brasiliæ (F. NOACK). — *Calonectria melioloidi*, *C. Lagerheimianæ* et *C. ambiguæ* subaffinis.

6. *Calonectria Pithecoctenii* d'Alm. et da Cam. in Rev. agron. Portugal. III (1905) pag. 254, t. V, f. 1-3. — Peritheciis plerumque cæspitosis, raro sparsis, ovoideis, sursum attenuatis, atro-purpureis

400-450 \approx 200-250; ascis subclaviformibus, octosporis, 65-75 \approx 11-13; sporidiis amygdaliformibus, sursum rotundatis, deorsum attenuatis, triseptatis, hyalinis, oblique monostichis vel irregulariter subdistichis, 17-20 \approx 8-10.

Hab. in ramulis emortuis *Pithecoctenii Squali*, in horto botanico Coimbra Lusitania (A. MOLLER).

7. *Calonectria stromaticola* P. Henn., Engl. Bot. Jahrb. XL (1907) 4985 p. 226. — Maculis epiphyllis stromatiformibus, atris, rotundatis v. effuso-angulatis; peritheciis marginalibus dense cæspitosis confluentibusque, ovoideis v. subglobosis, pallidis, papillatis, in sicco collabentibus, c. 200-300 μ . cr., extus pilosis, pilis variiformibus, hyalinis, obtusis, sæpe brevibus 30-50 \approx 8 v. flexuosis usque ad 250 \approx 3-4; ascis clavatis, apice obtuso-rotundatis, 8-sporis, 90-15 \approx 10-16; paraphysibus copiosis, filiformibus, hyalinis, c. 2 μ . cr.; sporidiis subtristichis, longe fusoideis, rectis v. curvatis, utrinque obtusiusculis v. acutiusculis, primo 1- dein 5-7-septatis, constrictis, hyalinis, 50-70 \approx 4-5.

Hab. in foliis *Lauraceæ* sp., Monzon 2000-2500 m. alt. in Peruvia (WEBERBAUER).

8. *Calonectria Rickiana* Sacc. et Syd., in Saccardo, Not. Mycol. IX, 4986 Ann. Myc. v. V (1907) p. 177. — Peritheciis in ascomycete epiphylo parasiticis, globulosis, 0,5 mm. diam., ceraceo-fragilibus, albidis, superficialibus, subinde squamulosis; ostiolo punctiformi impresso; ascis tereti-fusoideis, brevissime stipitatis apice obtusiuscule tenuatis, ibique incrassatis lumineque angustato præditis, 140-170 \approx 15, octosporis; paraphysibus filiformibus ascum subæquantibus; sporidiis distichis, fusoideis v. fusoideo-clavulatis, leniter curvis, 55 \approx 5,5-6, rarius usque ad 75-80 \approx 5,5-6, obsolete 4-5-septatis, non constrictis, hyalinis, intus minute granulosi.

Hab. in foliis *Nectandrae*, parasitice in peritheciis *Ascomycetis* immaturi cujusdam, Sao Leopoldo Brasiliæ (J. RICK).

9. *Calonectria olivacea* von Höhnelt, Fragm. z. Mykol., Sitzb. d. k. 4987 Ak. d. Wiss. Wien, Bd. CXVI, Abt. I (1907) p. 107. — Peritheciis semiimmersis, gregariis, liberis v. 2-3 adnatis, globosis vel ovoideo-piriformibus, 280 μ . diam., tenui-membranaceis, late ostiolato-papillatis, papilla conoidea 30-50 μ . lata; contextu parenchymatico, pallide olivaceo, circa ostiolum nigro-olivaceo et leniter cyaneo-tincto; paraphysibus numerosis, filiformibus; ascis clavatis, tenuiter tunicatis, basi breviter angustato-stipitatis, octosporis 80-100 \approx 8-9; sporidiis distichis, hyalinis, elongato-ellipsoideis, utrin-

que angustatis et rotundatis, grosse quadriguttulatis, demum quadrilocularibus, ad septa non constrictis, tenuiter tunicatis, 12-16 \approx 3-4. J. —

Hab. in ligno putri Fagi prope Rekawinkel Austriæ inf. — Species a typo generis recedens.

10. *Calonectria dolichospora* Sacc. et Trott., *Calonectria macrospora* 4988

Rick, Broteria V (1906) p. 41, non Sacc. — Peritheciis majusculis, 1 mm. latis, luteo-brunneis, carneo-membranaceis, subiculo perisporiaceo insidentibus, subhirsutis, papilla minuta; ascis 180 \approx 20, clavato-cylindraceis, curvulis, fere sessilibus; sporidiis 100-110 \approx 7, multiseptatis, multiguttulatis, uno apice angustioribus, hyalinis.

Hab. in foliis putridis Palmæ sp., Rio Grande do Sul Brasiliæ.

11. *Calonectria Copelandi* P. Henn., Hedwigia XLVII (1908) p. 253. 4989

— Peritheciis hypophyllis, sparsis v. subgregariis, sphaeroideis papillatis dein collapsis, aurantiacis, 200-250 μ .; ascis fusoides vel clavatis sæpe curvulis, apice acutiusculis, 8-sporis, 40-60 \approx 10-14; sporidiis oblique monostichis v. subdistichis, cylindraceo-fusoides, hyalinis, 7-septatis, 20-26 \approx 4-4,5.

Hab. in foliis Orchidaceæ, Mindanao, Santa Cruz ins. Philippin. (COPELAND).

12. *Calonectria gigaspora* Masee, Kew Bull. n. 7 (1906) p. 257. — 4990

Peritheciis aggregatis, obovatis, levibus, glabris, coccineis, 1 mm. altis; ascis longissimis, octosporis, aparaphysatis; sporidiis oblique monostichis v. supra distichis, hyalinis, subfusoides, demum tri-septatis, 90-100 \approx 20.

Hab. in culmis Sacchari officinarum, Trinidad Indiæ occ. (HAET). — Facile dignoscenda forma peritheciorum et latitudine sporidiorum.

13. *Calonectria Equiseti* Starb., Ascom. Schw. Chaco-Cordill. Exped., 4991

Archiv f. Bot. Bd. V (1905) p. 10. — Peritheciis plerumque ad nodos 3-30 aggregatis, cæspitose vel inter nodos in series longitudinaliter erumpentibus, rarissime nonnullis solitariis, primo globulosis, deinde turbinatis et mutua pressione difformibus, demum collabescentibus, manifeste, sed non papillatim ostiolatis, primo pallide ochraceis, deinde leniter fuscescentibus, albido-puberulis, 200-300 μ . diam.; ascis octosporis, clavatis, sessilibus, sursum lumine sæpe acutato, 44-50 \approx 6-7,5; sporidiis in superiore parte distichis vel conglobatis, in inferiore monostichis, oblongatis, utrinque obtusiusculis, guttulas 2 apicales, 2 medias foveantibus, hyalinis, 9-10 \approx 2,5-3,5; paraphysibus nullis.

Hab. in caulibus aridis Equiseti, Quinta pr. Laguna de la Brea prov. Jujuy, Argentina. — Species nulli descriptæ affinis sporidiis minoribus nec non matrice distincta videtur.

14. **Calonectria decora** (Wallr.) Sacc. — Syll. II, pag. 543. — var. 4992
parasitica Hazsl. Sphaer. Hung. p. 7, t. I, f. 2. — Ascis clavatis, brevissime noduloso-stipitatis, filiformi-paraphysatis; sporidiis inæqualiter distichis fusoides, triseptatis, ad septa non constrictis, utrinque acutatis, subinde sursum incrassatis, hyalinis, $30-36 \times 8-9$.

Hab. parasitica in peritheciis Massariæ Populæ ad ramos Aceris Pseudoplatani pr. Eperies Hungariæ.

15. **Calonectria Fuckelii** (Sacc.) Rehm — Syll. II, p. 545. — var. 4993
Everniæ Rehm, in Tranzsch. et Serebrianikow, Mycotheca rossica fasc. II, n. 68 (1910). — Sporidiis primum 2-, dein 4-locularibus.

Hab. in Everniæ spec. in Rossia.

16. **Calonectria circumposita** Kirschst., Verh. Bot. Ver. Brandenb. 4994 XLVIII (1906) p. 59. — Peritheciis circulariter dispositis, plerumque conjunctim erumpentibus, flavidis, piriformibus, $200-300 \mu$. diam.; ascis fusoides, breviter pedicellatis, supra obtusatis, octosporis, $60-70 \times 10-12$; sporidiis supra oblique monostichis v. irregulariter distichis, infra recte monostichis, hyalinis, oblongis vel fere fusoides sed utrinque rotundatis, medio septatis et constrictis, 4-guttulatis, demum quadrilocularibus, $14-16 \times 4-5$; paraphysibus indistinctis.

Hab. in charta putri prope Rathenow Germaniæ.

PARANECTRIA Sacc. — Syll. II p. 552, IX p. 987, XVII p. 812.

1. **Paranectria Wildemaniana** P. Henn., Mission E. Laurent fasc. III 4995 (1906) p. 316. — Peritheciis in mycelio *Meliolæ* v. *Dimerosporii* parasitantibus, sparsis v. gregariis, subglobosis v. ovoideis, hyalino-subflavescentibus, membranaceo-subcellulosis, tenuibus, subtranslucentibus, $100-140 \mu$. diam., squamulis alccorniformibus, apice repetito-furcatis, hyalinis, $20-30 \mu$. longis vestitis, basi hyphis filiformibus, hyalinis, septatis, $1,5-2 \mu$. cr.; ascis clavatis apice crasse tunicatis, rotundatis, 8-sporis, $37-48 \times 8-11$; paraphysibus filiformibus, copiosis, hyalinis, $1,5-2 \mu$. crassis; sporidiis subdistichis, fusoides, utrinque acutis, subrostellatis, 3-septatis, sæpe curvatis, guttulatis, hyalinis $15-20 \times 5-7$.

Hab. in foliis Coffeæ ad mycelium *Meliolæ* v. *Dimerosporii*, Ubangi, Congo, Africa.

2. **Paranectria imperconspicua** v. Höhn. Fragm. Mykol. VII, Sitzb. 4996

k. Ak. d. Wiss. Wien CXVIII, Abt. I (1909) p. 822 (an potius «imperspicua»?). — Peritheciis gregariis v. subcæspitosis, globosis, flavidis, 50-100 μ . latis, superficialibus, liberis, tenui-membraneis, ostiolo indistincto præditis, contextu peritheci 6-10 μ . cr., parenchymatico, extus pilis v. setulis hyalinis laxis tectis; ascis breviter clavatis, sessilibus vel breviter incurvo-stipitatis, supra rotundatis et æqualiter incrassatis, 36-44 \approx 16-21, 2-4 sporis v. octosporis; paraphysibus tenuiter filiformibus supra ramosis, parvis; sporidiis distichis v. tristichis, hyalinis, fusoides, utrinque acutis, appendicibus obtusis 3-4 \approx 1 præditis, quadrilocularibus, 16-24 \approx 6-7, ad septa non constrictis, loculis mediis longioribus.

Hab. in stromatibus Discodothis Filicum ad truncos Filicum in Horto bot. Buitenzorg in ins. Java.

BROOMELLA Sacc. — Syll. VII p. 557, IX p. 988, XI p. 364.

1. *Broomella annulata* Rehm ap. Theiss., Ann. mycol. (1910) p. 461. 4997
— Ita nuncupanda est *Nectria annulata* Rehm — Syll. XVI, pag. 572 — quæ, teste Theiss. l. c., non differt a *Broomella Rickiana* Rehm in Broteria V (1906) p. 226.

GIBBERELLA Sacc. — Syll. II p. 552, IX p. 988, XI p. 363, XIV p. 649, XVI p. 599, XVII p. 813.

1. *Gibberella Saubinetii* (Montgn.) Sacc. — Syll. II, p. 554. — var. 4998
Mate Speg., Ann. Mus. Nac. Buenos Aires t. XVII (1908) p. 129.
— A typo recedit peritheciis rigidioribus sporidiisque subcrassioribus 20-22 \approx 5-6.

Hab. ad ramos dejectos putrescentes Illicis paraguariensis in silvis prope Campo das Cuías, Argentina Amer. austr.

2. *Gibberella rhododendricola* Rehm, Ann. Mycol. V (1907) p. 543. 4999
— Peritheciis in stromate orbiculari nigro, per peridermium erumpente, 0,5 mm. diam., 6-8 gregarie sessilibus, globulosis, minimis, atris, poro haud conspicuo pertusis, glabris, parenchymatice nigro-fusco-contextis, 0,12 mm. diam.; ascis cylindræis, 90 \approx 7-9, octosporis; sporidiis oblongis, utrinque rotundatis, 3-septatis, ad septa paullulum constrictis, hyalinis, dein dilutissime flavescentibus, 12-14 \approx 5-6, monostichis; paraphysibus ramosis.

Hab. ad ramulum Rhododendri hirsuti juxta viam ab Schlehdorf ad montem Herzogenstand alpium Baviaræ (Dr. REHM). — Imprimis minutie stromatis et peritheciolorum sporidiisque monostichis species distinguenda.

3. *Gibberella parasitica* Rick, Broteria V (1906) p. 41. — Peritheciis 5000 100 μ . diam., splendentibus, atris, superficialibus, coriaceo-corneis, gregariis, sed inter se separatis; ascis $45 \approx 13$; sporidiis hyalino-viridulis, octonis, uniserialibus, triseptatis, fusoides, $20 \approx 7$, guttullatis, paraphysibus nullis.

Hab. parasitica in Stereo quodam, Rio Grande do Sul Brasiliæ. — Vergit ad genus *Melanomma*, differt autem a *Melanommate Porothelio* B. et C. sporidiis multiseriis et colore.

LOCULISTROMA Patterson, Charles et Veihmeyer in U. St. Dep. Agric. Bur. of Plant Ind. Bull. 171 (1910) pag. 11 (Etym. *stroma* et *loculi*). — Stroma erectum, cylindraceum, carnosum, molle, viride v. album, loculis etiam pycnidicis præditum. Loculi ascophori sparsi, subimmersi, ostiolati. Asci clavati, cylindracei, octospori, paraphysati; sporidia fusioidea, 3-pluriseptata, olivacea.

1. *Loculistroma Bambusæ* Patt., Charl. et Veihmeyer l. c., tab. I. — 5001 Stromate erecto, molli, carnosio, plerumque sessili, 1 cm. circ. long., 2 mm. cr., extus obscure viridi v. nigro; peritheciis (loculis) stromate subimmersis, subsphæroideis, $125 \approx 100$; ascis octosporis, clavatis, cylindraceis, $45-50 \approx 9-10$; sporidiis olivaceis, fusoides, 3-septatis, distichis, $22 \approx 4,5-5$; conidiis (sporulis) primariis in loculis amplis orientibus, hyalinis, filiformibus, $14-16 \approx \frac{3}{4}-1$; sporophoris $8 \approx 0,5$; conidiis secundariis obscure olivaceis, 1-3-ocularibus, hyphis olivaceis limitatis.

Hab. in inflorescentia *Bambusæ* (Phyllostachydis) sp. in qua cladomanias generat in America boreali.

Sect. 6. Hyalodictyæ.

PLEONECTRIA Sacc. — Syll. II p. 559, IX p. 990, XVII p. 814.

1. *Pleonectria pinicola* Kirschst., Verh. Bot. Ver. Brandenb. XLVIII 5002 (1906) p. 59. — Peritheciis cæspitose erumpentibus, in stromate rubido insidentibus, globosis, breviter papillatis, rubro-lateritiis, squamulis viridi-flavis tectis, dein apice depressis, 300-400 μ . d.; ascis cylindraceo-clavatis, breviter pedicellatis, supra rotundatis, $100-120 \approx 8-12$, microsporis numerosis fartis, $3 \approx 1$; sporidiis 4, oblique monostichis, hyalinis, varie conformatis, fusoides, clavatis v. cylindraceis, 7-9-transverse et loculo medio 1-longitudinaliter

septatis, 20-30 \times 4-6; paraphysibus filiformibus, multiseptatis, 3 μ . crassis.

Hab. in ramis putrescentibus Pini silvestris prope Rathenow Germaniæ.

CILIOMYCES v. Höhn., Sitzb. k. Ak. d. Wiss. Wien, CXV, Abt. I (1906) pag. 25 (Etym. *cilium* et *myces* ob sporidia ciliata). — A genere *Pleonectria* imprimis dignoscitur sporidiis pariter fusoides-vel ellipsoideo-oblongis, muriformibus, hyalinis, sed utrinque 1-ciliatis.

1. *Ciliomyces oropensis* (Ces.) v. Höhn. l. c. p. 25, *Nectria oropensis* 5003 Ces. — Syll. pag. 511 et IX, pag. 967 — *Pleonectria lichenicola* (Crouan) Sacc. — Syll. II, p. 560. — Perithecia pilosula, carnea; asci 120 \times 20, octospori; paraphyses diffuentes; sporidia 26-36 \times 9-11, disticha, fusoides, 6-septato-muriformia, non constricta, hyalina utrinque cilio 7-8 μ . longo, subulato aucta.

CALYPTRONECTRIA Spegazz., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 412 (Etym. *calyptra* velum, h. e. *Nectria* obtectæ). — Perithecia minuta, sparsa, molliuscula, rubescentia, epidermide tecta; asci paraphysati, octospori; sporidia muriformia, hyalina. — Est *Hyponectria* dictyospora.

1. *Calyptronectria platensis* Speg., l. c. p. 412 cum icon. — Peritheciis ex hemisphærico sublenticularibus 120-150 μ . diam., subcarnosis, contextu obscure aurantio donatis, subiculo luteo dense ramuloso 3-4 μ . cr. septulato vestitis; ascis breviter subclavatis 60 \times 16, paraphysibus filiformibus parvis obvallatis; sporidiis distichis, subellipsoideis utrinque obtusiusculis, 20 \times 8, transverse 5-septatis, loculis 1-3 longitudinaliter divis, ad septum medium præcipue constrictis, hyalinis.

Hab. ad ramos dejectos putrescentes *Manihot carthagensis* in sepibus prope La Plata, Argentina Amer. austr.

2. *Calyptronectria argentinensis* Speg., l. c. p. 412. — Peritheciis subglobois 250-300 μ . diam., basi ligno insculptis, carnosulis, glabris, ostiolo crasso brevi nigrescente coronatis; ascis linearibus breviter pedicellatis 110-150 \times 15, paraphysibus filiformibus obvallatis; sporidiis monostichis non v. leniter subfusoides utrinque sæpius obtusiusculis, 20-24 \times 7-9, ad septa constrictulis, 5-septatis, loculo medio supero sæpius septo longitudinali diviso.

Hab. ad caules aridos putrescentesque Fœniculi piperiti Santa Catalina prope Buenos Aires Argentina Amer. austr.

MEGALONECTRIA Speg. — Syll. II p. 560, IX p. 992, XVI p. 599, XVII p. 815.

1. *Megalonectria Yerbæ* Speg., Ann. Mus. Nac. Buenos Aires t. XVII 5006 (1908) p. 129. — Peritheciis cæspitosis, subglobosis, sessilibus 200-250 μ . diam. rubris, carnosulis glabris, in sicco sæpius collabescentibus, sæpius Stilba 1- v. 5 cingentibus; Stilbis erectiusculis e pedicello, 1-5 mm. long., 0,1-0,2 mm. cr., et capitulo subgloboso roseo-aurantio 0,5-0,7,5 mm. diam. constitutis; conidiis obovatis 6-8 \approx 2,5-4, hyalinis, ? catenulatis; ascis cylindraceo-subclavatis sursum obtusissime rotundatis crassiusculeque tunicatis 100-120 \approx 20-25, tetrasporis v. octosporis, aparaphysatis v. pseudoparaphysatis; sporidiis ellipsoideis v. elongato-clavulatis 3-5- v. 7-9-septulatis, 25-40 \approx 10-14, v. 30-45 \approx 10-12, ad septum medium valide constrictis, loculo uno alterove septo longitudinali diviso, hyalinis.

Hab. vulgata ad ramos emortuos putrescentes Ilicis paraguariensis, Rep. Argentina Amer. austr. — Species facile in duas (altera ascis tetrasporis subparaphysatis sporidiisque brevioribus 3-5-septatis, altera ascis octosporis aparaphysatis sporidiis longioribus) dividenda. — *Meg. cæspitosæ* Speg. affinis.

2. *Megalonectria madagascariensis* P. Henn., in Voeltzkow Reise 5007 Ostafrika III (1908) p. 29, taf. III, fig. 21. — Peritheciis solitariis v. gregarie erumpentibus, subglobosis, sicco collapsu-cupulatis, atro-castaneis, 200-260 μ . diam. contextu cellulosis rufo-brunneis; ascis clavatis, obtusis, 60-90 \approx 15-20, octosporis; paraphysibus filiformibus hyalinis, 2-2,5 μ . cr.; sporidiis oblique monostichis vel subdistichis, oblonge ellipsoideis, ovoideis v. subfusoides, 15-21 \approx 8-10, flavido-fusculis, 5-7-septatis, muriformibus; conidiophoris solitariis v. fasciculatis, stilbiformibus, rigidis, stipite pallido-nigricanti c. 15 mm. longo, 150 μ . cr., capitulo hemispherico v. subgloboso, atro-brunneo, conidiis ellipsoideis vel ovoideis, 5-6 \approx 3, hyalinis.

Hab. ad corticem arborum, Fénérive Madagascar.

TREUBIOMYCES v. Höhn., Fragm. Mykol. VIII (1909) in Sitzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, p. 1180 (Etym. a cl. doct. MELCH. TREUB. recens demortuo, jam meritissimo direttore Instituti botanici javanici). — Omnino superficialis; subiculum tenui-mem-

branaceum, ex hyphis hyalinis constitutum, dense verrucis parenchymaticis apice setula singula auctis tectum; perithecia mollicarnosa, pallida, hemisphærica, ostiolo rotundato depresso setulis nigris circumdato prædita; asci aparaphysati clavati, quadrioctospori; sporidia hyalina, muriformi-septata.

1. *Treubiomycetes pulcherrimus* v. Höhn. l. c. p. 1181, fig. 1. — Su- 5008

biculo rotundato 4-5 mm. lato, pelliculas hyalinas tenues reticulatim erumpentes, 5-6 μ . circ. cr. formante; hyphis pluriguttulatis crebro septatis 3-6 μ . cr., stratum unicum formantibus; peritheciis sparsis hemisphæricis basi applanatis, subcarnosis, flavido-incarnatis 300 μ . latis, ostiolo impresso 12 μ . lato præditis, setulis (æque ac illis in subiculo sparsis) acicularibus rigidulis acutis 120-200 \approx 8-9 e bulbillo parenchymatico orientibus; perithecii contextu pluristratoso ex cellulis 8-10 μ . diam. formato; ascis aparaphysatis, rosulatis, crasse clavatis, apice rotundatis, basi obtuse cuneatis, octosporis, 60-70 \approx 25-28, tunica 5 μ . cr.; sporidiis pluriseriatis cylindraceo-oblongis v. subclavulatis utrinque rotundatis, hyalinis, plerumque 7-septatis, septisque longitudinalibus partitis, guttulatis, 34-38 \approx 8-9.

Hab. in pagina superiore foliorum *Fici* elasticæ, socio mycelio *Limacinulæ samoensis* in Horto alpino prope Tjibodas in ins. Java.

Sect. 7. Phæodictyæ.

PELORONECTRIA A. Moell. — Syll. XVI p. 599.

1. *Peloronectria umbilicata* Syd., Ann. Mycol. V (1907) p. 358. — 5009

Stromatibus tuberiformibus, globoso-lenticularibus vel depresso-globosis, medio, præcipue in juventute, umbilicatis, lignosis, primo albido-flavis, tandem atro-brunneis vel atris, $\frac{1}{2}$ -1 cm. diam. matricem non ambientibus, tota superficie peritheciis globosis 150-200 μ . diam., dense obsessis; ascis 25-40 \approx 10-12, octosporis; sporidiis bi-tristichis, oblongis, 3-septatis, non v. vix constrictis, raro cellula una media septo longitudinali vel obliquo percursa, utrinque obtusis, fuscis, 10-16 \approx 4 $\frac{1}{2}$ -6.

Hab. in ramis *Eugeniæ* sp. Sao Francisco dos Campos Prov. Sao Paulo, Brasilia.

ULEOMYCES P. Henn. — Syll. XI p. 364.

1. *Uleomyces decipiens* Syd., Ann. Mycol. VII (1909) pag. 174. — 5010
 Stromatibus hypophyllis, maculis indeterminatis pallidis insidentibus, sparsis, rotundatis, 0,5-2 mm. diam., hemisphaerico-applanatis, atro-sanguineis; peritheciis numerosis, immersis; ascis subglobois v. late ovatis, apice incrassatis, sessilibus, 32-44 \times 25-35, octosporis, aparaphysatis; sporidiis conglobatis, oblongis, utrinque rotundatis, primo 3-septatis, hyalinis v. brunneolis, dein 3- raro 5-septatis, brunneis, medio constrictis, semel longitudinaliter septatis, 20-28 \times 10-14.

Hab. in foliis vivis *Quercus thalassicae*, Hiji Kure-mura Tosa, Japonia (YOSHINAGA).

*Sect. 8. Scolecosporæ.***OPHIONECTRIA** Sacc. — Syll. II p. 563, IX p. 994, XI p. 365, XIV p. 651, XVI p. 601, XVII p. 815.

1. *Ophionectria ? anomala* Racib., Bull. Acad. Sc. Cracovie (1906) 5011
 p. 910. — Peritheciis candidis breviter cylindraceis, 220 μ . alt., 190 μ . lat., vertice obtusis, pulvinulo albo minuto insidentibus, crasse tunicatis, superficie granulosis, cavitate phialiformi 170 \times 100, ostiolis non emergentibus; ascis cylindraceis paraphysibus hyalinis, septatis, obvallatis, 160 \times 8-10, octosporis, apice rotundatis; sporidiis filiformibus asci longitudine parallelis vel tortis, septatis, in articulos 8 \times 1,5 secedentibus.

Hab. in pagina inferiore foliorum viventium *Hydnophyti* sp. prope Buitenzorg Ins. Javæ. — Species ob stromatis et paraphysium præsentiam in genere anceps.

2. *Ophionectria cupularum* Kirschst., Verh. Bot. Ver. Brandenb. 5012
 XLVIII (1906) p. 60. — Peritheciis solitariis v. acervatis, pallide brunneis breviter obscurius papillatis, circa papillam denique umbilicatis, globosis, minutissimis, membranaceis; contextu minute celluloso, brunneo; ascis cylindraceis apice rotundatis incrassatisque, breviter pedicellatis, 8-sporis, 100-110 \times 8-10; sporidiis distichis, hyalinis, intus guttulado-granulosis, parallelis, denique pluricellularibus, utrinque acutis, rectis, curvulisve, 50-60 \times 4; paraphysibus nullis.

Hab. in cupula sub foliis putrescente *Quercus pedunculatæ* in silvis Borussiae.

Syll. fung. XXII (X-1912)

3. *Ophionectria ambigua* v. Höhn., Ann. Myc. III (1905) pag. 550, 5013
cum icon. — Peritheciis globosis, ostiolo papilliformi præditis, 500 μ . diam., solitariis v. gregariis, superficialibus, levibus, opacis, rugulosis, obscure rubro-brunneis, aqua immersis substantiam rubro-violaceam emittentibus, coriaceo-membranaceis, non carbonaceis; paraphysibus filiformibus, immersis, mox diffluentibus; ascis numerosis, clavatis, tunica tenui præditis, supra angustatis, obtusis, uniformiter pedicellatis, 250 \times 10, octosporis; sporidiis tristichis, subhyalinis v. pallidissime brunneolis, cylindraceis, apice rotundatis v. subacutatis, 5-8-septatis, quoque loculo 1-2-guttulato, rectis v. leniter curvulis, 65 \times 5.

Hab. in ligno pineo putri, Altenmarkt in Austria inf.

4. *Ophionectria cylindrothecia* Seaver, Mycologia I (1909) pag. 70, 5014
tab. IV fig. 4. — Peritheciis gregariis v. sparsis clavato-cylindraceis v. fusoides, basi stipitiformi præditis, flavidis, diaphanis, subglabris, siccis duriusculis, sæpe basi hyphis septatis parce cinctis, 275-300 \times 125-150; ascis cylindraceis v. clavatis, octosporis, 100-125 \times 12-15; sporidiis elongatis utrinque tenuatis e hyalino dilutissime flavidis, 7-12-septatis, 60-75 \times 5, paraphysibus obsoletis.

Hab. in culmis putrescentibus Zeæ Maydis, Ohio Amer. bor.

— Sporidia intra ascum veluti membrana propria inclusa videntur.

5. *Ophionectria* ? *flavida* (Rick) Sacc. et Trott., *Cyanocephalum flavidum* Rick, Broteria V (1906) p. 224. — Peritheciis solitariis v. parce aggregatis, ovoideis, flavidis, 0,5 mm. diam., carnosomembranaceis; ascis lageniformibus, 150 μ . longis, ventre 40 μ . cr., fere sessilibus; sporidiis primitus vermiculatis, plurimis, in fragmenta numerosissima secedentibus, hyalinis, articulis 3 \times 2 v. diversæ longitudinis; paraphysibus nullis.

Hab. in ligno putrido in Brasilia. — A typo generis ascis lageniformibus recedit, sed a *Cyanocephalio* sporidiorum fabrica omnino differt.

TRICHONECTRIA Kirschst., Verh. Bot. Ver. Brand. XLVIII (1906) p. 60 (Etym. *thrix* capillus et *Nectria*). — Perithecia superficialia, solitaria v. parce cæspitulosa, tenuia, membranacea, setulis spinuliformibus albis vestita; contextu subhyalino, prosenchymatico. Asci ovoidei, octospori. Sporidia fusioidea, pluricellularia, hyalina. Pseudoparaphyses e cellulis globulosis majusculis conflatae. — A gen. *Calonectria* et *Ophionectria* imprimis peritheciis aculeolatis distinctum genus.

1. *Trichonectria aculeata* Kirschst., l. c. p. 60. — Charact. generis. 5016
Perithecia globoso-depressa, rubenti-flavida, tenera, aculeolis $80 \approx 14$ vestita, $200-300 \mu$. diam.; asci $50-65 \approx 18-25$; sporidia disticha, denique 8-cellularia, recta, fusioidea, $35-54 \approx 5-6$.

Hab. in cortice trunci adhuc stantis, emortui *Abietis excelsæ* in silvis Borussiae.

TRELEASIA Speg. — Syll. XIV p. 640.

1. *Treleasia* ? *musicola* Speg., An. Mus. Nac. Buenos Aires t. XIX 5017 (1909) p. 411, cum icon. — Peritheciis constipatis subiculo gossypino obovolutis $60-65 \mu$. diam., $100-120 \mu$. long., supra in ostiolum cylindraceum $60-200 \approx 20-30$ productis; ascis ellipsoideo-fusioideis basi cuneatis breviter tenuiterque pedicellatis, $75-80 \approx 15$, aparaphysatis, tetrasporis; sporidiis lineari-fusioideis acutissimis, primo continuis dein 3-septatis, non constrictis, $60-75 \approx 7-8$.

Hab. ad rhachides putrescentes Musarum, La Plata Rep. Argentina Amer. austr. — Species a *T. Sacchari* Speg. peritheciis minoribus, ascis gracilioribus evidentius pedicellatis et præcipue sporidiis 3-septatis recedens.

COPRANOPHILUS Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) p. 410 (Etym. *copranon* fimum et *philos* amicus). — Perithecia cæspitosa, cylindraceo-conoidea, albicantia; ascis ellipsoidei subsessiles, aparaphysati octospori; sporidia angustissime lanceolata 1-septata, hyalina, ascum subæquantia. — Genus pulchellum *Treleasiae* cognatum, fimicola.

1. *Copranophilus spinuliformis* Speg., l. c. p. 410, cum icon. — Acer- 5018
vulis subglobosis parvis, 3-4 mm. diam., albo-cinerellis, spinuloso-hirtis; peritheciis constipatis, globosis, ostiolo corniformi quadruplo longiore armatis, totis $100-120 \mu$. diam., $100-150 \mu$. alt.; ascis constipatis ellipsoideis, sessilibus, $80 \approx 30$, aparaphysatis; sporidiis subclavulatis, apice altero acutissimis altero obtusiusculis, $60-70 \approx 5$, diu continuis, serius 1-septatis.

Hab. in alveolis Coleopterorum in fimo vaccino arido pr. La Plata Rep. Argentina Amer. austr.

TUBEUFIA Sacc. et Penz. — Syll. XIV p. 652.

1. *Tubeufia Helicomycetes* v. Höhn. Fragm. Myk. IX (1909) in Stzb. 5019
k. Ak. d. Wiss. Wien, CXVIII, Abt. I, pag. 1477. — Subiculo in maculis nigricantibus insidenti, tenui, effuso, ex hyphis 4-5 μ .

lat. constituto, conidiis *Helicomycetis* (hyalinis v. leniter cyaneis 150 \times 3-4,5, septatis) tecto; peritheciis gregariis, erectis, elongatis, 250-300 μ . alt., 130-150 μ . latis, carnosomembranaceis, basi albis v. leniter cyaneis, supra flavidis, apice obtusulis ochraceis, infra levibus supra asperulis; contextu parenchymatico; paraphysibus filiformibus, 1-1,5 μ . cr., supra nodoso-ramosis, numerosis; ascis cylindraceis, supra rotundatis tunica crassa præditis basi in pedicellum brevem angustatis, 150-170 \times 12-13, suboctosporis; sporidiis filiformibus, 4 μ . latis, hyalinis, demum cyanescentibus, septatis, articulis 5-7 μ . long.

Hab. in graminaceis emortuis, Biberbach prope Sonntagsberg Austriae inf. (STRASSER).

BARYA Fuck. — Syll. II p. 563, IX p. 997.

1. *Barya parasitica* Fuck. — Syll. II, pag. 562 et IX, pag. 997 — 5020
var. *cæspitosa* Peck 43 Rep. (1890) pag. 33, t. IV, f. 13-17. — Peritheciis in cæspites dense confertis et sæpe in rostellum satis longum productis; ascis sporidiisque quam in typo paullo angustioribus et longioribus.

Hab. *parasitica* in peritheciis Bertiae moriformis ad ligna faginea, in Mont. Catskill Amer. bor.

2. *Barya montana* Racib., Bull. Acad. Sc. Cracovie (1906) p. 909. — 5021
Peritheciis longe ovoideis, in mycelio stilbaceo subsuperficialibus, 750-900 μ . alt. et 400 μ . lat., apice rotundatis et ostiolis non emergentibus rotundis præditis, contextu flavido et firmo, circumcirca mycelio flocculoso albo obductis; ascis aparaphysatis longe linearibus apice acute conicis ibique incrassatis, octosporis, 300 \times 4-5; sporidiis filiformibus hyalinis rectis v. spiralibus dein in ipso asco in articulos innumeros lineares secedentibus.

Hab. ad Araneas in ramis Podocarpi cupressinae, in M. Gedeh ins. Javæ. — Status conidicus *Stilbi* formam sistit.

3. *Barya salacensis* Racib., Bull. Acad. Sc. Cracovie (1906) p. 909. 5022
— Mycelio hypophyllo sulphureo, plagulas rotundas 5-7 mm. latis convexulas formante; peritheciis numerosis in medio plagulae superficialibus, globosis vel semiglobosis, 0,7 mm. latis, cavitate 420 \times 300, ovato-phialiformibus, pariete crasso non omnino levi sulphureo, ostiolis applanatis; ascis aparaphysatis fasciculatis, hyalinis, longe linearibus 400 μ . long. apice incrassatis et conicis, initio octosporis; sporidiis asci longitudine filiformibus spiraliter convo-

lutis dein in articulos innumeros secedentibus, 12-14 μ . cr., articulis 10 \approx 2,5, hyalinis.

Hab. ad Aphides in pagina inferiore foliorum Castaneæ argenteæ et Lasianthi sp., in Mont. Salak et Gedeh ins. Javæ.

4. **Barya lichenophila** Ferd. et Winge, Botan. Tidsskr. XXIX (1908) 5023 p. 312, fig. 4. — Peritheciis in sicco corneis, dense gregariis, liberis, bysso argillaceo-subroseola insidentibus, eaque primum vestitis, dein subnudis, conicis, parum ventricosis, succineis vel demum fuscidulis, 350-500 \approx 250-350, ascos maturos per apicem pertusum ejaculantibus; peridio pseudoparenchymatico, parvi-cellulari, oleoso, sub vitro diaphano; filamentis byssi sub vitro hyalino-fuscidulis, crebre septatis, guttulis oleosis repletis, ad 7 μ . lat.; ascis angustissime cylindraceis, apicem versus lenissime attenuatis, globulo terminali circ. 4 μ . diam. instructis, postice leniter sensimque attenuatis, sessilibus, 165-175 \approx 5-5,5; sporidiis ascos adæquantibus, octonis, eseptatis, filiformibus, $\frac{3}{4}$ μ . lat., hyalinis.

Hab. ad thallum subputridum Cladoniæ sub Calluna humi jacentem prope Borris Jutlandiæ.

OOMYCES B. et Br. — Syll. II p. 564, XVI p. 606.

1. **Oomyces javanicus** v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVI, 5024 Abt. I (1909) pag. 314, cum icon. — Stromatibus superficialibus solitariis v. 3-4 connatis globosis v. ovoideis, flavidis 0,5 mm. d.; peritheciis ovoideis quoque stromate singulis immersis, flavis 350 \approx 250, ostiolo rotundo; paraphysibus copiosis ramosis et anastomosantibus; ascis tereti-clavatis apice rotundatis basi in stipitem brevem tenuatis 190-200 \approx 14-16; sporidiis tereti-fuscoideis apice 3 μ . cr., medio 4-5 μ ., deorsum attenuatis et 1,5 μ . cr., 160 μ . long., pluriseptatis, articulis superioribus 8-10 μ . mediis 4 μ . long.

Hab. in pagina inf. foliorum Vaccinii varingæfolii, Mt. Pangerango Javæ.

2. **Oomyces incanus** Rehm, Ann. Mycol. (1905) p. 227. — Peritheciis 5025 sparsis, raro gregariis, sessilibus, lageniformibus, versus apicem attenuatis ibique apertis, scabriusculis, fuscidulis, mollibus, 500 μ . alt., 350 μ . lat., contextu parenchymatico, intus hyalino, extus dilute fuscidulo, siccis incano-pulverulentis; cylindraceis, apice rotundatis, c. 300 \approx 5, octosporis; sporidiis filiformibus, continuis, rectis, hyalinis, asci longitudine 0,5-0,8 μ . lat., parallele positæ; paraphysibus filiformibus, rectis, hyalinis, 1 μ . cr.

Hab. ad folia præteriti anni sicca *Solidaginis Virgaureæ* in valle Kirnitz prope Scandau, Saxonia (W. KRIEGER).

TORRUBIELLA Boud. — Syll. IX p. 994, XI p. 365, XVII p. 816.

1. *Torrubiella brunnea* v. Keissl., Ann. Mycol. VII (1909) p. 292. — 5026

Stromate subcirculari, explanato, byssaceo, c. 2-3 mm. diam., primum pallido, mox brunneo, hyphis longis, subrectis, vix ramosis, crasse tunicatis, hyalinis, demum subbrunneolis (c. 4 μ . diam.) composito; peritheciis supra stroma (imprimis margine stromatis) gregariis, numero c. 10-25, oblongo-conicis, breviter rostratis, subrectis, brunneis, pilis longis, simplicibus, subflexuosis, crasse tunicatis, leviter brunneis (c. usque ad $90 \approx 4$ metientibus) tectis, c. $500 \approx 150$; ascis filiformibus, numerosis, c. $270 \approx 6$, 8-sporis, apice crasse tunicatis; paraphysibus paucis, filiformibus, apice leviter capitatis, sparse guttulatis; sporidiis rectis, ut videtur continuis nec in articulos secedentibus, guttulatis, c. $270 \approx 1$.

Hab. in Coccide quodam foliis *Melicopis* insidenti, in insula Samoa Upolu prope Leulumoenga (RECHINGER).

2. *Torrubiella sericicola* von Höhnelt, Sitzb. k. Ak. d. Wiss. Wien 5027

CXVIII, Abt. I (1909) p. 302. — Peritheciis subiculo parco arcte adnato insidentibus, solitariis v. seriatis v. sparsis v. sæpe 2-pluribus basi connatis, flavis v. aurantiis, carnosomembranaceis mollibus, ellipsoideis conico-papillatis $160-180 \approx 95-100$, extus ob cellulas hemisphæricas prominulas 8 μ . diam. verruculosas; ascis copiosis clavato-cylindræis $90 \approx 5$, deorsum tenuatis, supra capitulatis, 8-sporis; sporidiis filiformibus $80-90 \approx 1,3-1,4$ cr., crebro septatis, jam in asco in articulos 4-5 μ . long. dilabentibus, paraphysibus tenuissimis asco brevioribus.

Hab. in folliculis sericeis flavis *Criculæ trifenestratæ* prope Buitenzorg ins. Javæ.

3. *Torrubiella ochracea* Patouill., Bull. Soc. Myc. Fr. XXII (1906) 5028

pag. 58. — Stromate pallide ochraceo, lanoso, effuso vel tuberculiformi; peritheciis levibus, succineis, ovoideo-conicis, $500 \approx 300$, basi immersis, gregariis; ascis longissimis, 5 μ . cr., apice capitatis, octosporis; sporidiis linearibus 1 μ . cr., hyalinis, multiseptatis, in articulos cylindræos 6-8 μ . long. dilabentibus.

Hab. in corpore *Lepidopteri* adulti cujusdam, Papeenoo Polynesia. — *T. tomentosæ* affinis.

HYPOCRELLA Sacc. — Syll. II p. 579, IX p. 1002, XI p. 367, XIV p. 653, XVI p. 603, XVII p. 817.

1. *Hypocrella Sydowii* Sacc. et Trott., *Hypocrella globosa* Syd., Ann. Mycol. V (1907) p. 359, non Racib. — Stromatibus omnino globosis, hypophyllis vel ramicolis, sparsis v. aggregatis, in foliis plerumque nervos sequentibus, 2-5 mm. diam., primo ochraceis, tandem atris, in sicco duris lignosis, superficie ob perithecia parum prominula verrucoso-tuberculatis, subiculo nullo; ascis longe cylindraceis, apice rotundatis, deorsum attenuatis, 70-100 \times 7-9, octosporis; sporidiis filiformibus, ascorum fere longitudine, intra ascos jam in articulos secedentibus; articulis sporidiorum oblongo-cylindraceis, utrinque rotundatis, hyalinis, 6-7 \times 2-2 $\frac{1}{2}$.

Hab. in foliis ramisque Melastomataceæ cujusdam, Sao Francisco dos Campos, Sao Paulo Brasilæ.

2. *Hypocrella globosa* Racib., Bull. Ac. Sc. Cracovie (1906) p. 907. — Stromatibus globosis basi angustata in pagina superiori foliorum insidentibus, 2-3,5 mm. diam., cartilagineis, griseo-nigris, intus albidis; peritheciis subpiriformibus et supra collo elongato præditis, 360-400 \times 100-122, parietibus flavo-aurantiacis, immersis sed ostiolo papilliformi, prominulis; paraphysibus nullis; ascis linearifusoideis, apice rotundatis, 160-190 \times 8, octosporis; sporidiis anguste linearibus inasco secedentibus et tunc articulis breviter cylindraceis, hyalinis levibus, 2,5 \times 1-1,5.

Hab. in foliis præcipue ad nervos Castilloæ elasticæ, Buitenzorg in ins. Java.

3. *Hypocrella Grewiæ* Koord., Botan. Untersuch. (1907) pag. 179, fig. 13 III. — Stromatibus amphigenis, sparsis, carnosus, pulvinatis, sessilibus, applanatis, pulchre aurantiacis, papillato-ostiolatis, 2-2,5 mm. diam., peritheciis immersis; ascis linearibus, apice obtusis et haud incrassatis, 120-130 \times 6-8; sporidiis filiformibus 100-110 \times 1,5-2, hyalinis in articulos innumerabiles secedentibus.

Hab. in foliis vivis Grewiæ Micrococci prope Gombong Java, martio 1905 (KOORDERS).

4. *Hypocrella Schizostachyii* P. Henn., Hedw. XLVII (1908) p. 253. — Stromatibus hemisphærico-tuberosus, carnosus-lignosis, duris, botryose, verrucosis, cinereo-testaceis, intus subaurantiacis c. 1,5-2 cm. diam.; peritheciis immersis ovoides, ostioli punctiformi-prominulis, rufo-brunneis; ascis cylindraceis, vertice hemisphærico rotundatis, 8-sporis, 100-160 \times 6-8; sporidiis filiformibus plurise-

ptatis, mox in asco secedentibus, cellulis cylindraceis, $5-8 \times 1,5-2$, hyalinis.

Hab. in ramulis vivis *Schizostachyi* spec., Luzon, Prov. Rizal ins. Philippin. (F. W. FOXWORTHY).

5. *Hypocrella Mollii* Koords., Bot. Untersuch. (1907) p. 179, f. 13 II. 5033

— Stromatibus carnosulis, disciformibus, 2-4 mm. diam. albis, hypophyllis, sparsis, papillato-ostiolatis; peritheciis stromate immersis; ascis linearibus $170-180 \times 7-8$, apice rotundatis et haud incrassatis, 8-sporis, aparaphysatis; sporidiis filiformibus, ascos subæquantibus, $170-175 \times 1,5-2$, hyalinis, multiseptatis, in frustula 15-17 μ . longa, utrinque truncata dilabentibus.

Hab. in foliis emortuis *Premnæ tomentosæ* cultæ prope Kaliwiro prov. Kedu Java (KOORDERS).

6. *Hypocrella Engleriana* Koord., Botan. Untersuch. (1907) p. 177, 5034

fig. 13 I. — Stromatibus carnosus, pulvinatis, basi constrictis, extus fuscis, 0,5-1 mm. cr. hypophyllis; peritheciis immersis; ascis cylindraceis 60-65 μ . longis, 4-5 μ . latis, 8-sporis; sporidiis filiformibus asci longitudinem subæquantibus, 1 μ . latis, dense minute septulatis ac guttulatis, tarde in articulos secedentibus.

Hab. in foliis emortuis *Mangiferae indicæ* Penuuggolan prov. Kedu Java (KOORDERS). — Est verisimiliter status ascophorus *Aschersoniæ lecanioidis* Henn.

7. *Hypocrella Weberbaueri* P. Henn., Engl. Jahrb. XL (1907) p. 226. 5035

— Stromatibus foliicolis superficialibus, hemisphærico-pulvinatis, carnosos-corneis, aurantiacis, ostiolis obscurioribus punctoideis, 3-4 mm. diam., subiculo membranaceo, pallido c. 1 mm. lato; oculis immersis ovoideis, pallidis; ascis filiformi-fusoideis, apice attenuatis capitellatis, 1-sulcatis, 5-7 μ . latis, basi attenuatis, 8-sporis, $250-300 \times 10-16$; sporidiis flexuosis, linearibus, mox in particulas fusoides utrinque acutiusculas, 15-20 \times 2-3 dilabentibus.

Hab. in foliis *Marantaceæ* ejusd., inter Monzon et Huallaga Dep. Huanaco, Peruvia (WEBERBAUER). — Ad *Mœlleriellam* transit.

8. *Hypocrella Warneckeana* P. Henn., Engl. Jahrb. XXXVIII (1905) 5036

p. 113. — Stromatibus carnosos-ceraceis, subrotundatis, tuberculosus, 1-1,5 mm. diam., gregarie sparsis hypophyllis, pallide flavidulis subfarinosis; peritheciis 3-15, subliberis, ovoideis v. subglobosis, pruinoso-subvelutinis, vertice poroso-ostiolatis, c. 200-250 μ .; ascis cylindraceis, apice hemisphærico-capitellatis, octosporis, $170-200 \times 5-7$; sporidiis in cellulas subfusoides, hyalinas, 10-12 \times 2, dilabentibus.

Hab. in foliis *Myrianthi arborei*, Amani Ost-Usambara Africæ centr. (WARNECKE).

9. *Hypocrella coronata* v. Höhnelt, *Ergeb. Bot. Exp. Sübras.* (1901) 5037 Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. p. 22. — Stromate flavido, pallido, sparso, amphigeno, superficiali, discoideo, medio fortiter depresso, peripherice irregulariter crassequè marginato, 3-4 mm. lato, in membrana 2-3 mm. lata, albida insidenti, margine aculeis plus vel minus numerosis, usque ad 1 mm. long. pluries seriatis prædito; contextu stromatico ex hyphis 4-5 μ . crassis tunica firma præditi constituto; peritheciis omnino immersis quandoque verruciformi prominentibus, 400-500 μ . alt. 200 μ . latis, ellipsoideis, supra subcolliformi attenuatis, epapillatis; ostiolo minuto, brunneo; parietibus 25 μ . circ. cr., subparenchymaticis; paraphysibus nullis; ascis cylindræis elongatis 8-10 μ . cr.; sporidiis filiformibus in asco mox in articulos cylindræos hyalinos utrinque acutos, 8-10 \times 1,5 secedentibus.

Hab. in foliis *Myrtaceæ* cujusdam, Mangaguá prope Santos Brasilæ. — *H. citrinæ* Speg. affinis.

10. *Hypocrella bispora* v. Höhnelt, *Fragm. Mykol.* VII (1909) in Stzb. 5033 k. Ak. d. Wiss. Wien CXVIII, p. 826. — Stromatibus amphigenis superficialibus, sparsis, ex umbrino nigris, crasse scutellatis, medio umbonatis, 1-5 mm. cr., margine rotundatis obtusis 1 mm. cr., rotundatis 4-5 mm. long. et in membrana basali facile secedente, albida, medio usque ad 200 μ . cr. insidentibus; ostioliis rotundatis depressis, non prominentibus, 20-25 μ . latis; contextu stromatico intus pallido, valido, plectenchymatico; peritheciis in stratu peripherico omnino immersis, subovoideis 220-280 \times 110-120, parietibus 12-16 μ . cr., collo usque ad 120 μ . longo, raro nullo et tunc peritheciis 160 \times 95; ascis aparaphysatis, cylindræis, supra rotundatis, 120-140 \times 4-5 plerumque bisporis; sporidiis filiformibus ascum longitudine æquantibus, in eodem asco in articulos cylindræos 4-6 \times 1,5 secedentibus.

Hab. in foliis *Pinangæ* sp. et in *Coccidiis* eorundem, in silva primæva Salak pr. Buitenzorg in ins. Java (SCHIFFNER).

11. *Hypocrella palmicola* P. Henn., in Voeltzkow, *Reise Ostafrika* 5039 III (1908) p. 29, tab. III, fig. 23. — Stromate plano-pulvinato, suborbiculari, atro-fusco c. 5 mm. diam., ostioliis granulatis; peritheciis ovoideis immersis; ascis cylindræis, apice rotundato-capitellatis, octosporis, 60-80 \times 3,5-4; sporidiis filiformibus pluriguttulatis, septulatis, 0,6-0,8 μ . cr.

Hab. ad folia *Palmae* cujusdam, Ile aux Prunes, Madagascar.

12. *Hypocrella cretacea* v. Höhn., Stzb. k. Ak. d. Wissensch. Wien 5040

CXVIII, Abt. I (1909) pag. 311. — Stromatibus albis cretaceis, senio ochraceo-flavidis, pulvinatis, inæqualiter orbicularibus v. oblongis, 2,6 mm. latis, 1-1,5 mm. alt.; ostiolis griseo-brunneis punctatis, basi contractis subsessilibus; peritheciis immersis ovoideis ampulliformibus collo 120 \approx 60-80, totis 500 \approx 220; paraphysibus nullis; ascis cylindricis utrinque leviter tenuatis 4-8-sporis, longitudine peritheci 5-9 μ . cr.; sporidiis filiformibus ascum subæquantibus, in articulos cylindricos, 6-9 \approx 2, jam in asco dilabentibus.

Hab. in margine vaginarum foliorum *Amomi* sp. longe seriatim disposita, in scutellis *Coccidiorum* parasitica in silvis Tjibodas ins. Java. — Affinis *Hyp. Amomi* Rac.

13. *Hypocrella botryosa* Syd., Ann. Myc. VIII (1910) pag. 40. — 5041

Stromatibus epiphyllis, superficialibus, 2-3 mm. latis, sparsis, e parte media majuscula et processibus ovato-globosis v. ovatis botryose aggregatis compositis, succineis v. succineo-aurantiacis; peritheciis omnino immersis, minutissimis, paucis in processibus sitis; ostiolis haud prominulis punctiformibus; ascis cylindræis, apice rotundatis, octosporis, 130-225 \approx 8-14; sporidiis filiformibus, mox in asco secedentibus; cellulis sporidiorum subfusoides, hyalinis, 8-11 \approx 2,5.

Hab. in foliis vivis ? *Cyperaceæ* (margine acute spinulosis), Dumagnate in Cuernós Mt. prov. Negros or. in ins. Philippinens. (A. D. E. ELMER). — *Hypocrellæ Warneckeanæ* affinis.

14. *Hypocrella Amomi* Racib., Bull. Ac. Sc. Cracovie (1906) p. 908. 5042

— Stromate ex albo flavido tincto; hypothallo subrotundo, albo, acute marginato, initio suffulto, sursum in stroma album 1-2 mm. altum et usque ad 4 mm. latum abeunte, intus albo supra minute colliculoso; peritheciis in colliculis nidulantibus, phialiformibus, ostiolis longicollibus sed non emergentibus, parietibus flavis; peritheciis 210 μ . lat. collis 550 μ . long.; ascis aparaphysatis 400 \approx 8-10 sublinearibus, apice paullo crassioribus, truncatis, initio octosporis; sporidiis filiformibus stipatis mox in articulos innumeros secedentibus, articulis fusoides 13-16 \approx 2.

Hab. parasitice ad *Aphides* in pagina inferiore foliorum *Amomi* sp. prope Salak ins. Javæ.

15. *Hypocrella convexa* Racib., Bull. Ac. Sc. Cracovie (1906) p. 908. 5043

— Stromatibus albis v. flavidis, globosis, 2-4 mm. cr., basi applanatis levibusque sursum convexis, acute marginatis, coriaceo-tenui-

bus, cortice flavo 25 μ . cr. ostiolis non emergentibus, minutis, rotundis punctato; peritheciis omnino immersis phialiformibus, albotunicatis longicollibus, 540 \approx 160-190; ascis aparaphysatis cylindraceis apice subtruncatis 210 \approx 15, initio octosporis; sporidiis filiformibus hyalinis mox in articulos bacillares utrinque rotundatos 5-8 \approx 1 secedentibus.

Hab. in scutellis Coccidiorum in foliis Myristicæ et Garciniae, Depok et Buitenzorg ins. Javæ.

EPICHLÖE Tul. — Syll. II p. 578, IX p. 1001, XI p. 367, XIV p. 655, XVI p. 607.

1. *Epichloë Kyllingiae* Racib., Bull. Acad. Sc. Cracovie (1906) p. 902. 5044
— Stromate epicaulino, brunneo-nigro 2-20 mm. longo, 350-500 μ . cr., margine tenuiori nigro et sterili, pulvinato, levi vel arescendo verruculoso, intus pallide brunneolo; peritheciis ovoideolongatis 320-380 \approx 95-120, non prominentibus; paraphysibus nullis; ascis linearibus, 180-210 \approx 5, apice rotundatis, octosporis; sporidiis linearibus, hyalinis, septatis, et in articulos 1 μ . cr., etiam in asco secedentibus.

Hab. in caulibus *Kyllingiae* monocephalæ, in herbis prope Buitenzorg ins. Java.

FLEISCHERIA Penz. et Sacc. — Syll. XVII p. 819.

1. *Fleischeria paulensis* v. Höhnelt, Ergeb. Bot. Exp. Südbres 1901, 5045
Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) pag. 21. — Stromate valido, nigro-opaco, superficiali, minute verrucoso, rugoso, intus pallido, superficialiter sordide violaceo, rotundato-nodoso usque ad 6,5 mm. lato, basi angustato sterili et late adnato, supra in parte subdistincte limitata fertili; contextu valido parenchymatico et ex hyphis 7-10 μ . cr. constituto; peritheciis immersis confertis, elongato-ellipsoideis supra attenuatis, 350 μ . altis, 150 μ . latis, ostiolo in papillula insidenti; paraphysibus nullis; ascis numerosis, cylindricis, supra rotundatis hemisphaericis fortiter incrassatis, 200 \approx 6-7, octosporis; sporidiis hyalinis ascum subæquantibus filiformibus, 1,5 μ . cr., subparallelis, septatis, sæpe in cellulas cylindraceas 6-8 μ . long. secedentibus.

Hab. in ramulis Melastomaceæ ejusdam, Cantareira, Sao Paulo Brasiliæ.

DUSSELLA Pat. — Syll. IX p. 1004.

1. **Dussella Orchideacearum** Rick, Broteria V (1906) p. 42. — Stro- 5046
mate pulvinato, amplexicauli, late aurantiaco-velutino, irregulari,
1 cm. diam., rigido, carnosio; peritheciis congregatis in tubercula
inter se separata et rubra, ostiolis minutis prominentibus; ascis
70-80 \times 3-5, breviter pedicellatis, octosporis; sporidiis linearibus, vix
3 μ . cr., longitudine ascis; paraphysibus purpureis, angustissimis.

Hab. in caule fructifero emortuo Orchideae epiphytae (? *Tillandsiæ*), Rio Grande do Sul Brasiliæ.

2. **Dussella violacea** v. Höhnelt, Ergeb. Bot. Exp. Südbas. 1901, 5047
Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. p. 21.
— Stromate rotundato-nodoso, carnosio-compacto, intus non gela-
tinoso, plectenchymatico et ex hyphis e hyalino violaceis septatis
4-11 μ . cr. constituto, 15 mm. lato 9-10 mm. alto, parte sterili
extus intusque plus minusve violacea, levi, minute granuloso-pi-
losa, fertili distincte limitata, pallida ob ostiola peritheciarum pun-
ctulata; peritheciis arcte gregariis subcylindratis 700-800 μ . long.
et usque ad 180 μ . cr., collo crassiusculo usque ad 45 μ . cr. præ-
ditis; paraphysibus numerosis, rigidis filiformibus 0,5 μ . cr.; ascis
longe pedicellatis, cylindratis, supra incrassatis, usque ad 500 \times
4-5; sporidiis filiformibus immaturis.

Hab. ad culmos *Bambusæ*, Alto da Serra prope Santos Sao
Paulo Brasiliæ.

CLAVICEPS Tul. — Syll. II p. 564, IX p. 998, XVI p. 609, XVII
p. 820.

1. **Claviceps Rolfii** Stevens et Hall, Botan. Gazette L (1910) p. 462, 5048
fig. 3 a, 4. — Sclerotii e flavo griseis, globosis, maturis rugosis,
3 mm. circ. cr.; capitulo flavescenti, stipite filiformi 1-1,5 cm.
long. crassiore quam in *Cl. Paspali*; peritheciis cylindratis-ovoi-
deis 816 \times 225; ascis cylindratis 375 \times 3; sporidiis filiformibus
260-275 \times 0,5-1.

Hab. in Paspalo dilatato America bor,

2. **Claviceps Paspali** Stevens et Hall, Botan. Gazette L (1910) p. 462, 5049
fig. 1, 2, 3 b, 5. — Sclerotii e flavido griseis, globosis maturis
rugosis, 3 mm. circ. diam.; capitulo flavidulo, stipite filiformi usque
ad 1 cm. longo; peritheciis numerosis ovoideis, 340 \times 119; ascis
cylindratis 174 μ . longis; sporidiis filiformibus, 101 \times 0,5-1.

Hab. in Paspalo levi et dilatato, North Carolina Amer.

bor. — Huc spectant *Sclerotium Paspali* Schw., *Sphacelia Paspali* Bornet, *Spermædia Paspali* Fr.

3. **Claviceps Sesleriæ** Stäger, Centralbl. f. Bakter., II Abt. XVII 5050 (1906) p. 784. — Stromate sive sclerotio vulgo lineari-oblongo, obsolete trigono, recto v. arcuato, e parenchymate densissimo duro albido constante, cujus media parte in stellæ figuram redacta obscura; capitulis crassis, primum pallidis luteolisque, dein purpureo-violaceis; conidiis ovato-ellipsoideis $10,5-14 \times 3,5-7$, nonnihil in medio constrictis prætereaque nucleolis duobus oppositis donatis.

Hab. in inflorescentiis Sesleriæ cæruleæ prope Twann Helvetia.

4. **Claviceps Tripsaci** Stevens et Hall, Botan. Gazette, L (1910) p. 463, 5051 fig. 6-8. — Sclerotiiis levibus, ex albo brunneis vel nigris, subconnoideis, basi 4-5 mm. cr.; capitulo e griseo griseo-albo; stipite crasso ex albo purpureo-albido, 1-1,5 cm. longo; peritheciis numerosis ellipsoideis ore prominulis, $390 \times 153-187$; ascis cylindraceis, $145-175 \times 2-3$; sporidiis filiformibus 130 μ . longis; conidiis hyalinis, continuis, e fusideo lunulatis, $17,4-37,7 \times 2,9-8,7$.

Hab. in Tripsaco dactyloide, America bor.

5. **Claviceps Junci** Adams, Irish Naturalist XVI, n. 5 (1907) p. 168, 5052 fig. 1. — Sporidii (conidiis?) oblongo-ellipsoideis, $7-10 \times 2,8-3,5$, ovaria matricis explentibus; ascis non inventis.

Hab. in ovariis Junci glauci in Royal Canal co. Dublin Hibernia (Ireland). — Manifeste forma conidiophora, forte *Sphacelice* sp.

BALANSIA Speg. — Syll. IX p. 999, XI p. 366, XIV p. 656, XVI p. 607, XVII p. 821. — Ad hoc genus, teste Atkinson in Journ. of Mycol. XI (1905) p. 252, essent trahendæ *Epichloe Hypoxylon* Peck et *Dothidea vorax* B. et C.

1. **Balansia gigas** Racib., Bull. Acad. Sc. Cracovie (1906) pag. 905. 5053 — Stromate (an sclerotio?) globoso, 1-2 cm. lato, intus albido et molli, extus cortice tenui flavido-brunneo prædito; stromatibus singulis stipitatis, 30-50 in quoque sclerotii superficie, flavido-brunneis, 1-2 mm. cr., globosis, stipite 1-4 mm. longo præditis, rufo-brunneis; capitulis intus albis, cortice firmo, brunneo-rubro tectis; peritheciis anguste phialiformibus $500 \times 110-140$, immersis, ostiolis minutis; ascis aparaphysatis linearibus, $140-190 \times 3-4$, octosporis; sporidiis filiformibus copiose septatis hyalinis intra ascum non secedentibus.

Hab. in inflorescentia nondum evoluta Paspali sp., Buitenzorg in ins. Java.

CORDYCEPS Fr. — Syll. II p. 566, IX p. 998, XI p. 366, XIV p. 656, XVI p. 611, XVII p. 822.

1. **Cordyceps Ouwensii** v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII, 5054 Abt. I (1909) p. 309, cum icon. — Stromatibus ex thorace Muscarum oriundis 4-5 mm. long. stipite circiter 200 μ . cr., cylindraceo infra capitulum inaequaliter nodosum; capitulis subglobosis basi apiceque applanatis 1 mm. latis et 0,7 mm. alt. ob ostiola verruculoso-punctatis; peritheciis in quoque stromate 50-60 immersis parallelis 800-900 \times 180-210; paraphysibus nullis; ascis 4 μ . cr. cylindricis; sporidiis filiformibus 1 μ . cr.

Hab. in Muscis emortuis Sukabumi ins. Java (P. A. OUWENS). — Adsunt stromata conidica cylindracea 6-7 μ . longa, apice clavata, conidiis globulosis perexiguus 1 μ . diam. sterigmatibus suffultis. A cæteris speciebus Dipterigenis omnino diversa.

- 2 **Cordyceps rhizoidea** v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII 5055 Abt. I (1909) pag. 307. — Mycelio membranaceo insectum obducente; stromata cylindrica radicumformia varie torta ex albo brunneola 7-8 cm. long., 0,5-1 mm. cr. emittente; peritheciis superficialibus caespitose v. seriatim dispositis 360 \approx 300 pallidis; ascis subfusiformibus deorsum acutatis 160-210 \times 13-16, octosporis; sporidiis cylindraceis utrinque acutatis unicellularibus 80 \approx 5-7.

Hab. in larvis Coleopterorum ad terram dejectis, Buitenzorg ins. Java (P. A. OUWENS). — In subgenere *Racemella* locanda species.

3. **Cordyceps interrupta** von Höhn., Sitzb. k. Ak. d. Wiss. Wien 5056 CXVIII, Abt. I (1909) p. 303 cum icon. — Stromate cylindrico 52 mm. longo, contorto et subflexuoso, atro-castaneo, basi simplici 1,5 mm. cr., infra medium in ramos ternos erectos 0,5-1 mm. cr. diviso, glabro; peritheciis hinc inde ramis innatis et caespitulos subverticillatos prominentes efformantibus, ellipsoideis 700 \approx 300-350 atro-conico-papillatis; ascis perithecii longitudine fragilibus, apice rotundatis et hemisphaerico-incrassatis, cylindricis 3-5 μ . cr. octosporis; sporidiis filiformibus asci longitudine parallelis 1 μ . cr. jam inasco in articulos 3-4 μ . longos dilabentibus.

Hab. in capite cujusdam Coleopteri (?) terra dejecti, Buitenzorg ins. Java.

4. **Cordyceps Barberi** Giard., Compte rend. de la Soc. biol. Paris 5057

(1894) p. 823, Massee in Rev. Mycol. XX (1898) p. 88, tab. 178, f. 34-35. — Aggregata, præsertim in larvæ regione cervicali sita, 2-4 cm. alta, stipitato-clavata, tota albida v. sursum pallide succinea; parte sporigera dimidiam v. tertiam fungi partem æquante, apice acuta et sæpe curvula, 3-4 mm. cr., levi, continua, minutissime (ob ostiola) punctulata; stipite gracili, tomentello; peritheciis ovoideis, omnino immersis; ascis anguste clavato-cylindræis, apice contracto-capitulatis, octosporis; sporidiis parallelis, leviter tortis, hyalinis, filiformibus, medio lenissime incrassatis, denique multiseptatis, 115-125 μ . longis, articulis 2-5 μ . long.

Hab. in larvis *Diatrææ saccharalis* in culmis *Sacchari* nidulantibus in insulis Barbados et Antigua Antillarum.

5. *Cordyceps clavulata* (Schw.) Ell. et Ev. North Am. Pyrenom. 5058 p. 61, t. XV, *Xylaria clavulata* (Schw.) B. et C. — Syll. I p. 327. — Stromate simplici, clavato; stipite cinereo circ. 3 mm. alt., $\frac{1}{2}$ mm. cr. in capitulum ovoideum v. ellipsoideum, 1 mm. long., 0,5 mm. cr., peritheciis prominulis rugulosum producto, ostiolis vix pertusis; ascis subsessilibus, medio crassioribus, sursum tenuatis sed apice rotundatis, 80-95 \times 8-10; sporidiis filiformibus, multiseptatis, 40-70 \times 1,5-2, articulis 3-5 μ . long.

Hab. ad scutella *Lecanii* ad ramos *Fraxini*, *Prini*, *Clethræ*, *Carpini*, New York, Newfield Canada Amer. bor. — An diversa a *Cord. pistillariæformi* B. et Br. — Syll. II, p. 568.

6. *Cordyceps Voeltzkowii* P. Henn. in Voeltzkow, Reise Ostafrika 5059 III (1908) p. 29, taf. III, fig. 22. — Stromatibus solitariis, clavatis, rufo-brunneis, 4-9 cm. long.; clavulis oblongis obtusis, 1-2 cm. long., 3-10 mm. lat., stipite cylindræo, cavo, c. 3-7,5 cm. long., 2-7 lato; peritheciis immersis, oblongo-ovoides, ostiolis punctoideis; ascis subfusideo-cylindræis, apice capitellatis rotundatis, 250-300 \times 4-7, tetrasporis; sporidiis parallelis filiformibus, plurigutulatis, septatis, 1,5-2 μ . cr.; stromatibus conidiophoris in medio stipitis sparsis, ovoideis c. 1-1,5 mm. long., 0,5-1 mm. cr., hyphis septatis ramosis, 3-8 μ . cr. rufo-brunneolis; conidiis ellipsoideis v. ovoideis, hyalinis, 6-7 \times 2-3.

Hab. ad terram in silvis, Andranohinaly Madagascar. — *C. Volkianæ* A. Moll. affinis.

7. *Cordyceps coronilla* v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII, 5060 Abt. I (1909) pag. 306, cum icon. — Ochraceo-flava; mycelio discum membranaceum radiosum formante; stromate e medio disco oriundo, stipite brevi crasso 360 \times 220 prædito et in capitulum

hemisphaerico-discoideum 1,5 mm. latum et 1 mm. cr. abeunte; peritheciis in quoque capitulo 18-20 verticaliter stipatis et immersis, conicis, 900 \approx 300, papillatis; ascis . . . immaturis.

Hab. in parvo hymenoptero (ex Tenthredinideis) prope Ignape Brasilia merid. (WETTSTEIN et SCHIFFNER). — Videtur affinis *Cord. subdiscoideae*.

8. *Cordyceps podocreoides* v. Höhnelt, Stzb. k. Ak. d. Wiss. Wien 5061 CXVIII (1909) p. 308, cum icon. — Stromatibus simplicibus raro furcatis, 4-5 cm. altis, basi radiceiformibus, ochraceo-flavis, sursum leviter incrassatis, capitulo globoso-ovoideo 4-6 mm. cr. 4-7 mm. alto, ex ochraceo-brunneo ob perithecia verrucoso-punctato; peritheciis immersis ovoideis 400 \approx 300, paraphysibus nullis; ascis cylindratis fragilibus octosporis apice hemisphaerico-incrassatis, 400-450 \approx 3-5; sporidiis parallelis filiformibus 1 μ . cr. in articulos octo bacillares secedentibus.

Hab. in larvis cujusdam Insecti majusculi dejecti in Horto bot. Buitenzorg insulae Javæ. — *C. entomorrhizae* et *C. Glaziovii* affinis.

9. *Cordyceps Klenei* Patouill., Bull. Soc. Mycol. Fr. XXIV (1908) 5062 p. 11, cum icon. — Mycelio aurantiaco, crusta membranacea, tenui fibrillisque repentibus, simplicibus ramosive, larvæ corpus fere omnino obducente; stromatibus e crusta mycelii exeuntibus v. ad fibrillas erectas, graciles, ramulosas contortasque e crusta exurgentes, prope apicem insertis, lageniformibus, aurantiacis, erectis, substipitatis, apice sterili pallidiori, obtusis; peritheciis immersis, ostiolis prominulis, contentu brunneo, ovoideo-elongatis; ascis linearibus, longissimis, 3-5 μ . cr., 8-sporis; sporidiis filiformibus.

Hab. in corpore larvæ Nelei sp. Brasilia (RICK).

10. *Cordyceps unilateralis* (Tul.) Sacc. — Syll. II, p. 570. — var. 5063 *javanica* v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I (1909) pag. 305, tab. I. — Stromate filiformi curvulo nigricante 13-14 mm. basi 280 μ . diam. medio 180 apice 110; peritheciis ovoideis apice acutis 300 μ . alt.; ascis 220-250 \approx 8, cylindricis apice capitulatis octosporis; sporidiis 200 \approx 2,5-3 in articulos 6-8 μ . long. dilabentibus.

Hab. in Formicis in Batavia ins. Java (VAN ROZENBURG).

Fam. 9. Coryneliaceæ Sacc.

CORYNELIA Achar. — Syll. II p. 813, IX p. 1073, XVI p. 650.

1. **Corynelia clavata** (L.) Sacc. — Syll. IX, p. 1073 — f. *macrospora* 5064 Syd., Deutsche Zentral-Afrika Exped. (1907-1908) II Bd. p. 99.
— A typo differt sporidiis majusculis, 10-17 \approx 10-14.

Hab. in foliis vivis Podocarpi milanjiani, Ruwenzori Africae trop.

2. **Corynelia oreophila** (Speg.) Starb., Ascom. Schwed. Chaco-Cordill. 5065 Exp., Arkiv f. Bot., Bd. V (1905) p. 20, fig. 13 a-c, *C. clavata* Auctt. p. p., *Alboffia oreophila* Speg., Fungi Arg. novi v. crit. pag. 295. — A *C. clavata* (L.) Sacc. em. dignoscitur peritheciis capitulis manifestim sulcis altiusculis tripartitis et est prædistincta species; ascis 38-50 \times 20-32 (p. sp.); sporidiis 10-15 μ . diam.; spermatiis 5-12 \times 2,5-3.

Hab. in foliis vivis Podocarpi spec., inter Tarja et Gran Chaco, Bolivia. — **Coryn. clavata** (L.) Sacc. — Syll. XVI, p. 650 — *C. tropica* (Awd. et Rabh.) Starb., l. c. f. 14, *Endohormidium tropicum* Auswd. et Rbh., Hedwigia (1869) p. 89, *Trullula tropica* Sacc. — Syll. III, p. 732 — *Corynelia clavata* f. *andina* P. Henn. Hedw. 1897 p. 230. — Hæc sp. ascis 30 \approx 16 (p. sp.), sporidiis 9-11,5 μ . diam. et præterea peritheciis cylindricis, sursum paullo angustioribus, vertice truncato-obtuso, undique gibberoso-verrucosis optime distinguitur, teste Starbäck l. c.

3. **Corynelia carpophila** Syd., Engler's Bot. Jahrbüch. 45 Bd. (1910) 5066 p. 264. — Stromate atro, pulvinato, fructus sæpe omnino obtegente; peritheciis lageniformibus, coriaceis, atris, in collum elongatum cylindricum usque ad 200 μ . cr. demum apice valde dilatatum (usque ad 400 μ .) integrum haud furcatum desinentibus; ascis variabilibus, mox cylindræis, mox saccatis, octosporis, apice obtusis, longe pedicellatis, p. sp. 18-28 \times 10-15; sporidiis monodistichis, primo hyalinis, dein fuscis, globosis, continuis, subtilissime verruculosis, 7-10,5 μ . diam.

Hab. in fructibus Rapanæ melanophilæ, Haenertsberg Transvaal, Africa austr. (LANE POOLE).

Fam. 10. Microthyriaceæ SACC. (*).

Subfam. 1. Microthyriæ.

Sect. 1. Hyalosporæ.

MYIOCOPRON Speg. — Syll. II p. 659, IX p. 1053, XI p. 379, XIV p. 686, XVI p. 633, XVII p. 861.

1. **Myiocopron Euryæ** Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 377. 5067

— Peritheciis primum immersis, minutis, nigro-carbonaceis, 0,3-0,4 mm. cr., 120-135 μ . altis convexis, inordinate positis v. circinatis in maculis hypophyllis flavo-virentibus, rotundatis 5-7 mm. diam. insidentibus; paraphysibus filiformibus mox diffluentibus; ascis cylindræis, utrinque angustatis, apice rotundatis, 80-94 \times 16, octosporis; sporidiis unilocularibus, monostichis, ovoideis, hyalinis, levibus, 16 \times 6, rotundatis.

Hab. in foliis *Euryæ acuminatæ*, M. Gedeh in ins. Java.

2. **Myiocopron Yerbæ** Speg., Ann. Mus. Nac. Buenos Aires t. XVII 5068

(1908) p. 130. — Subiculo nullo; peritheciis laxè gregariis, subcarbonaceis, dimidiato-scutatis, 75-100 μ . diam. stellatim dehiscen-
tibus; ascis obclavatulis superne tunica incrassata vestitis, 60-70 \times 25-30, octosporis, paraphysibus filiformibus apice subincrassatulis obvallatis; sporidiis oblique distichis, ellipsoideis, utrinque obtusis 26-28 \times 12-14, primo nubiosis, hyalinis, dein eguttulatis subchlorinis.

Hab. ad ramulos languidos vel emortuos *Ilicis paraguayensis* in dumetis circa San Pedro Argentine Amer. austr.

3. **Myiocopron valdivianum** Speg., Fungi Chilenses (1910) pag. 103, 5069

cum icon. — Peritheciis epiphyllis laxè gregariis scutiformibus minutissimis, perforato-ostiolatis, margine denticulato-fimbriatis prosenchymatico-radiantibus, olivaceis, glabris subiculo destitutis, 75-90 μ . diam.; ascis subcylindræis, paraphysatis, breviuscule pedicellatis, 27-30 \times 5-6; sporidiis oblanceolatis pusillis, hyalinis, 8 \times 2.

Hab. ad folia viva *Eugeniæ* cujusdam in silvis Bahia Corral Chile Amer. austr.

(*) Cfr. conspectum generum *Microthyriacearum* didymosporarum a prof. v. Höhnelt propositum in *Fragm. zur Mykol.* X, p. 14 (1910).

4. **Myiocopron argentinense** Spegazz., An. Mus. Nac. Buenos Aires 5070 t. XIX (1909) p. 423. — Maculis nullis; peritheciis sparsis arcte matrici adnatis, orbicularibus, 120 μ . diam., astomis opacis margine non fimbriatis; ascis fusoides, 50 \times 9-10, octosporis, aparaphysatis; sporidiis elongato-ellipsoideis, subnavicularibus, oblique distichis utrinque subobtusis, 14-15 \times 3-3,5, hyalinis, non v. grosse 1-2-guttulatis.

Hab. ad caules dejectos arescentesque Fœniculi piperiti, Santa Catalina, prope Buenos Aires, Argentina, Amer. austr.

COSCINOPELTIS Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) pag. 425 (Etym. *coscinon* cribrum et *pelte* scutum). — Stromata orbicularia dimidiato-scutiformia, superne laxè punctulato-ostiolata, inferne reticulato-loculigera; ascis octosporis; sporidia 1-locularia brevia, hyalina. — Est *Polystomella* amerospora et hyalospora.

1. **Coscinopeltis argentinensis** Speg., l. c. p. 425, cum icon. — Stro- 5071 matibus arcte matrici adnatis 1-5 mm. diam. nigris non vel vix nitidulis; ascis ellipsoideo-obovatis apice rotundato-subtruncatis crassissimeque tunicatis, basi abrupte cuneatis, brevissime noduloseque pedicellatis 50-60 \times 12-20, octosporis, paraphysatis; sporidiis distichis v. conglobatis, navicularibus, 12-14 \times 6-7, hyalinis.

Hab. ad folia viva Heteropteridis cujusdam in silva Bo- badal, Argentina Amer. austr.

Sect. 2. Phaeosporæ.

VIZELLA Sacc. — Syll. II p. 662, IX, p. 1054, XVII p. 861.

1. **Vizella Urvilleana** Speg., An. Mus. Nac. Buenos Aires t. XIX 5072 (1909) p. 424, cum icon. — Peritheciis sparsis coriacellis ostiolatis margine integerrimis, 200-250 μ , diam.; ascis cylindræis basi cuneatis breviter crasseque pedicellatis, 80-90 \times 18-20, octosporis, paraphysatis; sporidiis distichis utrinque rotundatis ellipsoideo-navicularibus, 18-20 \times 8-10, non v. minute 2-guttulatis, primo hyalinis dein fuliginis.

Hab. ad folia arida Panici Urvilleani, Juarez Celman, prope Cordoba, Argentina Amer. austr.

Sect. 3. Hyalodidymæ.

MICROTHYRIUM Desm. — Syll. II p. 662, IX p. 1055, XI p. 379, XIV p. 687, XVI p. 635, XVII p. 862.

1. *Microthyrium aberrans* Speg., Fungi Chilenses (1910) pag. 106, 5078
cum icon. — Peritheciis hypophyllis sparsis v. perlaxe gregariis, superficialibus dimidiato-scutatis, astomis, atris, glabris, prosenchymaticis, ambitu areola angustissima subiculigera cinctis, 100-180 μ . diam.; ascis ovatis v. obovatis, apice tunica crassissima umboniformi donatis, aparaphysatis, octosporis, 20-25 \times 12-15; sporidiis 3-4-stichis, hyalinis e cylindraceo oblanceolatis, 1-septatis, parvis, 10-11 \times 3.

Hab. in foliis siccis non dejectis Lardizabalæ biternatæ in silvis prope Cerro Caracol de Concepcion Chile Amer. austr. — An cum *Asterina labecula* Mont. comparanda?

2. *Microthyrium patagonicum* Spegazz., An. Mus. Nac. Buenos Aires 5074
t. XIX (1909) p. 426. — Peritheciis sæpius hypophyllis, sparsis v. laxe gregariis orbicularibus 100-150 μ . diam., planiusculis, astomis, margine denticulatis obsolete fimbriato-radiantibus; ascis subcylindraceis basi breviter crasseque attenuato-pedicellatis, 40-45 \times 10, octosporis, aparaphysatis; sporidiis distichis rectis vel leniter curvulis, 15-16 \times 2,5-3, loculis æquilongis eguttulatis, infero graciliore, hyalinis.

Hab. ad folia viva Mayteni magellanicae prope Lago Palomo, Patagonia, Argentina America austr. — *Micr. punctiformi* (B. et C.) Sacc. cognatum.

3. *Microthyrium eucalypticola* Speg., An. Mus. Nac. Buenos Aires 5075
t. XIX (1909) pag. 426. — Peritheciis plus minusve densiuscule gregariis orbicularibus 150 μ . diam., minute ostiolatis, margine vix denticulatis, membranaceo-coriaceis, opacis; ascis obclavatis, apice subtruncato-rotundatis, basi abrupte cuneatis brevissime umbonato-pedicellatis, 30-40 \times 8-9, octosporis, aparaphysatis; sporidiis ellipsoideo-elongatis 1-septatis ad septum non constrictis, 12-14 \times 3, loculis æqualibus non v. minute 2-guttulatis, hyalinis.

Hab. ad folia dejecta subputrescentia Eucalypti globuli in Parque La Plata, Argentina America austr. — *M. microscopico* Desm. paraffine.

4. *Microthyrium confertum* Theiss., Ann. Mycol. VII (1909) p. 352. 5076
— Mycelio aereo nullo; peritheciis epiphyllis, applanato-scutellatis,

dense confertis, totam foliorum superficiem æqualiter denseque atro-punctantibus, 150-200 μ . diam., poro pertuso, textura radiata, cellulis perbrevibus, cylindræo-rhomboideis; ascis tereti-clavatis, fere sessilibus, c. 42-55 \times 16-18 v. etiam elongatioribus, medio ventriculosis usque ad 65 \times 15, 8-sporis; sporidiis exacte ovatis, hyalinis, ad septum non v. vix constrictis, 12-15,5 \times 8,5-11, loculo supero (majore v. æquali v. minore) late rotundato, infero subconice angustato.

Hab. in foliis vivis Myrrhinii rubriflori in silva, Sao Leopoldo, Rio Grande do Sul Brasilia.

5. *Microthyrium applanatum* Rehm, Ascom. Exsicc. fasc. 41, n. 1774, 5077
Ann. Mycol. VI (1908) p. 122. — Peritheciis epiphyllis, gregariis, in folio haud decolorato sessilibus, dimidiatis, applanatis, poro perspicuo pertusis, distincte orbicularibus, hyphis radiantibus mollibus, tenuissime pseudoparenchymatice fuscidule contextis, glabris, nigritulis, 0,3-1 mm. diam.; ascis ovoideis, 30-35 \times 20, octosporis; sporidiis clavatis, utrinque obtusis, medio septatis, paullulum constrictis, hyalinis, 15 \times 6, distichis; paraphysibus nullis.

Hab. ad folia viva Myrtaceæ, Sao Leopoldo Rio Grande do Sul Brasiliæ (RICK).

6. *Microthyrium malacoderma* (v. Höhn.) Sacc. et Trott. *Microthy-* 5078
riella malacoderma v. Höhn. Fragm. Mykol. VIII (1909) in Sitzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, pag. 1173. — Peritheciis hypophyllis, mollibus, depressis, semiscutatis, sparsis, rotundatis, usque ad 1 mm. diam., 70-100 μ . cr., griseo-brunneolis, albido-griseis, ob drusas crystallinas pulveraceis, medio obscurioribus levibusque, margine pallidioribus tenuiter circumscriptis, astomis; contextu tenuiter membranaceo, parenchymatico, ad marginem tenuiori fibrilloso, maturo irregulariter in areolas fisso; stratu basilari tenui minute subplectenchymatico, hyalino; paraphysibus numerosissimis, atypicis, ramosis, plectenchymatico-floccosis, mucosis; ascis ovoideo-ellipsoideis, sessilibus, tunica uniformiter 5-6 μ . in-crassata (immatura usque ad 16 μ .), octosporis, 120-140 \times 80-85; sporidiis subparallelis, hyalinis, regulariter obtuse granulosis, contentu sordide pallide brunneolo, bilocularibus, rectis v. plerumque curvulis, cylindræis apice obtusis, septo non constrictis, 85-100 \times 18-24. J -.

Hab. in foliis Paratropiæ sp. in silvis Tjibodas in ins. Java.

— *Mic. Rickii* (Rehm) v. Höhn. affine.

7. *Microthyrium microscopicum* Desm. — Syll. II, pag. 662 — var. 5079

majus Speg., *Fungi Chilenses* (1910) p. 105. — Peritheciis 100-150 μ . diam., coriaceis, ostiolo angusto 10 μ . lato; ascis 45 \approx 8-9, apapophysatis; sporidiis 12-14 \approx 4-5.

Hab. in foliis dejectis siccis *Perseæ Lingue* in silvis Cerro Caracol de Concepcion, Chile, Amer. austr. — Var. **minus** Speg., l. c. — Differt a precedente peritheciis 110 μ . diam., subdiaphanis, ostiolo 20 μ . diam. præditis; ascis 35-40 \approx 8, paraphysatis; sporidiis 10-11 \approx 4. — In iisdem foliis prope Ciudad de Valdivia Chile Amer. austr.

8. **Microthyrium ?astomum** Speg., *Fungi Chilenses* (1910) pag. 104, 5080 cum icon. — Peritheciis hypophyllis subsparsis dimidiato-lenticularibus, pusillis, astomis glabris nigris subiculo destitutis, 50-60 μ . diam.; ascis paucis ovatis, percrasse brevissimeque pedicellatis, apapophysatis, 30 \approx 14; sporidiis oblanceolatis, hyalinis, parvis, 1-septatis non v. vix constrictis, 10 \approx 3.

Hab. in foliis dejectis *Cryptocaryæ Peumi*, in silvis Cerro Caracol de Concepcion Chile Amer. austr.

9. **Microthyrium disjunctum** Rehm, *Ascom. Exsicc. fasc. 41, n. 1775*, 5081 *Ann. Mycol. VI* (1908) p. 123. — Peritheciis in maculis orbicularibus epiphyllis, dilute nigritulis, interdum confluentibus, 4-7 mm. lat., plurimis gregariis, sessilibus, atris, dimidiatis, semiglobosis, poro pertusis, 120-150 μ . diam., haud confluentibus, prosenchymatice ex hyphis fusco-flavidulis, centrifugis contextis, ad marginem radiantibus in hyphas mycelii tenuissime flavidulas, 2-3 μ . cr., interdum rectangulariter ramosas et 2-3 parallele conglutintas, ansas magnas componentes abeuntibus, hyphopodiis carentibus; ascis clavatis, sessilibus, 45-48 \approx 10-12, octosporis; sporidiis clavatis, supra medium septatis, cellula superiore plerumque rotundata, inferiore acutata, haud constrictis, hyalinis, 10-12 \approx 4,5-5, distichis; paraphysibus subramosis.

Hab. ad folia viva *Solani*, Sao Leopoldo Rio Grande do Sul Brasilie (Rick). — Ab *M. confluenta* Pat. mycelio validiori, peritheciis confluentibus diversum.

10. **Microthyrium crassum** Rehm in Theiss., *Ann. Mycol.* (1910) 5082 p. 463. — Peritheciis gregariis, plerumque epiphyllis, crassiuscule orbicularibus subconice cupulato-elevatis, concentrice zonatis, atris, basim versus brunneolis, glabris, opacis, contextu radiato, ambitu determinato non fimbriato, 0,5-0,8 mm. diam., sæpius confluentibus, maculas flavescentes in folio efficientibus, arcte adherentibus; ascis cylindræis v. elongato-saccatis, breviter pedicellatis, superne

rotundatis, tunica crassa mucosa, abundanter paraphysatis, 8-sporis, $55-65 \times 15$, cylindraceis usque ad $75 \times 10-12$; paraphysibus tenuibus ascos superantibus, apice paullo incrassatis; sporidiis distichis, hyalino-viridulis, 1-septatis, non constrictis, oblongis, rotundatis, cellulis fere æqualibus, superiore paullo crassiore, $14-16 \times 5$.

Hab. in foliis vivis Solani boerhaviifolii in silvis, Sao Paulo, Rio Grande do Sul, sociis *Asterina vagante*, *Micropeltide vagabunda* et *Meliola glabra*.

11. *Microthyrium Laurenti* P. Henn., Mission E. Laurent fasc. III 5083 (1906) pag. 317. — Peritheciis amphigenis sparsis, minutis, dimidiato-orbicularibus, atris, hyphis radiantibus fusco-olivaceis, 130-160 μ . cinctis, centro pertusis; ascis clavatis, apice rotundato-obtusis, tunicatis, octosporis, $25-35 \times 8-11$; paraphysibus ramosis filiformibus hyalinis, 1 μ . cr.; sporidiis subdistichis oblongo-ellipsoideis v. subclavatis, curvulis, medio 1-septatis, guttulatis, hyalino-cyanescentibus, $10-14 \times 3,5-4,5$.

Hab. in foliis Coffeæ sp. Ubangi, Congo, Africa. — St. pyrenid.: *Leptothyrium Laurenti* P. Henn., sporulis innumeris, fusoides, utrinque acutis hyalinis, $3-4 \times 0,5-0,7$. — A *Microth. Coffeæ* omnino distinctum.

12. *Microthyrium leopoldvillianum* P. Henn., Mission E. Laurent 5084 fasc. III (1906) pag. 317. — Peritheciis epiphyllis, sparsis, dimidiato-orbicularibus, atris, 250-300 μ . diam., marginatis, contextu atro-ærugineo, radiato-celluloso; ascis clavatis, vertice crasse tunicatis, rotundatis, octosporis, paraphysatis, $80-90 \times 25-30$; sporidiis subdistichis, oblongis, subclavatis, hyalinis, medio 1-septatis, $28-30 \times 10-12$.

Hab. in foliis vivis Coffeæ sp. Leopoldville, Congo, Africa. — *Micr. Coffeæ* affine sed peritheciis, ascis sporidiisque satis diversum.

13. *Microthyrium rimulosum* Spiegazz., An. Mus. Nac. Buenos Aires 5085 t. XIX (1909) p. 426. — Maculis pallescentibus diffusis; peritheciis laxissime gregariis pusillis, orbicularibus, 120 μ . diam., astomis sed centro reticulato-rimulosis, margine integerrimis, subcoriacellis non nitentibus; ascis ovoideis sessilibus, apice crassissime tunicatis basi vix papillato-pedicellatis, $25-30 \times 15-18$, octosporis, paraphysatis; sporidiis elongato-obovatis, 1-septato-constrictulis, $10 \times 3-4$, hyalinis.

Hab. ad ramulos vivos Sapii salicifolii culti in Santa Catalina prope Buenos Aires, Argentina America austr.

14. *Microthyrium mebelense* P. Henn., in Fl. du Bas- et Moy.-Congo, 5086
in Ann. Mus. du Congo v. II, fasc. III (1908) p. 227. — Peritheciis epiphyllis gregarie sparsis, dimidiato-scutellatis, atris c. 1 mm. diam., contextu cellulosi olivaceo-fuscis; ascis ovoideis vertice crasse tunicatis, 8-sporis, apapophysatis; sporidiis conglobatis longe fusoides utrinque obtuso-rotundatis, medio 1-septatis haud constrictis, subinaequilateralibus, hyalinis, $30-40 \approx 8-10$.

Hab. in foliis indeterminatis, Mbela Congo, Afr. trop. (VAN-DEBYST).

15. *Microthyrium Phegopteridis* P. Magn., Abh. naturh. Ges. Nürnberg. 5087 XVI (1906) p. 74. — Scutellis e rotundato ovoideis, superficialibus, nigris, depressis, $78,45 \approx 104,6$, v. $83,68 \approx 146,64$, v. $104,69 \approx 141,41$, peripherice pseudoparenchymatice subradiantibus; peritheciis solitarie sparsis non crustiformi confluentibus; ascis sporidiisque ignotis.

Hab. in foliis et petiolis *Phegopteridis Dryopteridis*, prope Feucht Franconia (ZAHN). — A *M. litigioso* peritheciis non confluentibus et cellulis pseudoparenchymaticis minoribus distinctum. Species, ignota fructificatione, omnino dubia.

CLYPEOLUM Speg. — Syll. II p. 667. IX p. 1061, XI p. 380, XIV p. 688, XVI p. 637.

1. *Clypeolum vulgare* Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 384. 5088
— Peritheciis gregariis, depressis, rotundatis, nigris, astomis, sed demum scutellato-erumpentibus 0,5-0,7 mm. diam.; hyphis aëreis nullis; ascis globosis v. breviter ovoideis, 17-21 μ . diam., crasse tunicatis, octosporis; paraphysibus nullis; sporidiis ovoideis v. subclavatis, bilocularibus, levibus, hyalinis, $9-12 \approx 3-4$.

Hab. epiphytice ad folia arborum variarum: *Hydnocarpus*, *Garcinia*, *Canarium*, *Tjampea*, *Payena*, *Depok*, *Buitenzorg* in ins. Java.

2. *Clypeolum quercinum* (Schulz.) Sacc. et Trav. — Syll. XIX, p. 360 5089
— *Thyriascus quercinus* Schulz. in Flora (1877) p. 51, t. II, f. 3.
— Peritheciis scutiformibus, firmis, corneis, puncti magnitudine, nempe 250-330 μ . diam., nigris, adultis a matrice secedentibus; ascis erectis, sessilibus, obovato-vesiculiformibus, octosporis; sporidiis irregulariter stipatis, bilocularibus, loculo superiore subgloboso, infero tenuiore subconoideo, hyalinis, $19 \approx 10$.

Hab. in ramis corticatis *Quercus Roboris*, prope Eperies Hungariae, socia *Clithri quercina*.

CHÆTOTHYRIUM Speg. — Syll. IX p. 1061, XVI p. 636.

1. *Chætothyrium punctiforme* Rick, Broteria V (1906) pag. 40. — 5090

Mycelio aëreo nullo; peritheciis hypophyllis, superficialibus, gregariis, punctiformibus, 40-50 μ . diam., radiantibus, setulis repentibus, conspersis; setulis 2-3 μ . latis, ferrugineo-brunneis, vix ramosis, septatis, undulatis, usque ad $\frac{1}{4}$ mm. longis, aliquoties fasciculatis; ascis ovalibus v. oblongis, vix 30-40 \times 10, octosporis; sporidiis cylindraceis v. oblongis, uniseptatis, in septo vix constrictis, 10-15 \times 3-5, hyalinis, parte inferiore angustiore.

Hab. in foliis vivis *Myrsines* sp. Rio Grande do Sul Brasilæ.

TRICHTHYRIUM Speg. — Syll. IX p. 1062.

1. *Trichothyrium densum* Raciborski, Bull. Ac. Sc. Cracovie (1909) 5091

p. 380. — Plagulis amphigenis rotundatis, nigris, 0,3-0,8 cm. latis; cellulis hypharum cylindraceis 18-22 \times 8; hyphopodiis bilocularibus ovoideis 22-28 \times 10-13; peritheciis rotundatis, 100-150 μ . diam., ostiolo rotundato 16-18 μ . diam. præditis; ascis octosporis 30-40 \times 14-16; sporidiis hyalinis 14-17 μ . long. clavulatis, primum bi- dein trilocularibus, 3,5-4 μ . cr.

Hab. in foliis *Stechelocarpi* Barahoh, Depok prope Buitenzorg Java.

2. *Trichothyrium jungermannioides* Raciborski, Bull. Ac. Sc. Cracovie 5092

(1909) pag. 379. — Plagulis amphigenis rotundatis 1-2 mm. cm. diam., laxè dendriticis ex hyphis cellulis cylindraceis 26-34 \times 8-13 formatis et lateraliter hyphopodia bicellularia apice obtusa 38 \times 18 gerentibus constitutis; thallo 100 μ . lato lobato lobis apice rotundatis; peritheciis ad marginem thalli numerosis, junioribus subreniformibus, maturis rotundato-depressis, nigris, usque ad 100 μ . diam. margine in hyphas desinentibus; paraphysibus nullis; ascis clavato-ovoides, 37 \times 16-18, octosporis; sporidiis ovoideis, 12 \times 3-4, medio transverse uniseptatis, hyalinis, levibus.

Hab. in foliis *Connari* sp., Depok in ins. Java.

3. *Trichothyrium chilense* Speg., Fungi Chilenses (1910) p. 106, cum 5093

icon. — Vittis subiculi alternatim ramosis tenuibus, 5-15 mm. long., 80-200 μ . diam., nigris superficialibus, pinnatim prosenchymaticis, sæpius epiphyllis; peritheciis dimidiato-septatis, pusillis, 75-80 μ . diam., ostiolo 15 μ . diam. præditis, laxè vittis insidentibus; ascis obovatis brevissime crasseque pedicellatis, 30 \times 14, paraphysatis, octosporis; sporidiis 3-stichis oblanceolato-biconoideis, hyalinis, parvis 10 \times 4, uniseptatis, constrictis.

Hab. in foliis *Eugeniæ* sp. in silvis Bahia de Corral Chile
Amer. austr.

POLYSTOMELLA Speg. — Syll. IX p. 1063, XVI p. 639, XVII p. 865.

1. *Polystomella nervisequia* v. Höhn. Fragm. Mykol. VII (1909) in 5094
Sitzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, p. 850. — Stromatibus superficialibus, opace nigris, rugulosis, minute granulosis, irregulariter noduloso-elongatis, usque ad 700 μ . long., 500 μ . alt., coriaceo-carbonaceis, facile secedentibus, plerumque in maculis hypophyllis indeterminatis seriatim insidentibus; contextu stromatico parenchymatico; loculis rotundato-ovoideis, 100-120 \times 50-100, immersis, approximatis, perpendiculariter dispositis, apice ostiolo rotundato 45 μ . lato apertis; ascis clavatis, supra rotundatis ibique tunica usque ad 5 μ . incrassata præditis, basi in pedicellum brevem crassum attenuatis, octosporis, 60-78 \times 13-14; paraphysibus genuinis nullis; sporidiis hyalinis di- v. tristichis, elongato-cylindraceis, utrinque rotundatis, uniseptatis, 16-22 \times 4-5.

Hab. in foliis *Berliniæ* sp., Usambara or. Africae (ZIMMERMANN). — Cl. v. Höhn. l. c. contendit hoc genus cum *Microcyclo* Sacc. et Syd. collidere et tunc *Dothideaceas* spectare, quod hucque non satis probatum videtur.

Sect. 3. Phæodidymæ.

SEYNESIA Sacc. — Syll. II p. 668, IX p. 1064, XI p. 381, XIV p. 689, XVI p. 639, XVII p. 865.

1. *Seynesia elegantula* Syd., Engler's Bot. Jahrbüch. 45. Bd. (1910) 5095
p. 263. — Peritheciis amphigenis, præcipue epiphyllis, dimidiato-scutatis, 400-600 μ . diam., atris, irregulariter dehiscentibus, rugulosis, ambitu in hyphas radiantes fuscas septatas simplices vel ad apices versus dichotome ramosas longissimas usque 1 mm. longas et 6-7,5 μ . numerosas amœne abeuntibus; mycelio proprio parco v. subnullo; ascis clavatis, apice rotundatis, valde incrassatis, breviter stipitatis, 60-85 \times 20-28, octosporis; sporidiis distichis, oblongatis, medio constrictis, utrinque rotundatis, primo hyalinis, dein brunneis, 25-32 \times 9-11, loculo inferiore plerumque leniter angustiore; paraphysibus filiformibus.

Hab. in foliis Xymali spec., Lamuru Massai Africae trop. (SCHEFFLER).

2. *Seynesia Heteropteridis* Theiss., Broteria (1910) p. 9. — Peritheciis dimidiatis, mycelio laxo insidentibus v. etiam densius ab eo involutis, orbicularibus, radiatis, maculas atras tenues 1-3 mm. latas efformantibus; hyphis 7-8 μ . cr., hinc inde nodulosis, hyphopodiis destitutis; ascis ovoideis v. urceolatis, 60-65 \times 35-45, sessilibus; sporidiis brunneis, 1-septatis, constrictis, loculis subæqualibus, rotundatis, 24-28 \times 14-17.

Hab. epiphylla in foliis vivis *Heteropteridis*, Sao Leopoldo Brasiliæ.

3. *Seynesia ilicina* Syd., Ann. Mycol. VII (1909) pag. 170. — Peritheciis epiphylla, maculas atras orbiculares 3-10 mm. diam. formans; hyphis repentibus, fuscis, ramosis, c. 5-6 μ . crassis, hyphopodia pauca ovata gerentibus; peritheciis dimidiatis, gregariis, atris, cellulosis, 100-150 μ . diam., irregulariter dehiscentibus; ascis oblongo-clavatis, sessilibus, apice rotundatis, crassiuscule tunicatis, 35-55 \times 10-16, octosporis, paraphysatis; sporidiis distichis, oblongis v. oblongo-fusoides, medio v. circa medium septatis vix constrictis, fuscis, 15-20 \times 4-5.

Hab. in foliis *Ilicis integræ*, Komaba-Tokyo, Japonia.

4. *Seynesia Licanie* Rehm, Ann. Mycol. VII (1909) p. 538. — Maculis epiphyllis fuscidulis, suborbicularibus, tenuissime arachnoideis, 3-5 mm. diam.; peritheciis dimidiatis, poro pertusis, nigris, glabris, prosenchymatice radiatim contextis, usque ad marginem perithecii, fuscis 250 μ . diam., gregarie sessilibus, in hyphis longis rectis fuscis, 5-6 μ . cr., septatis, rectangulariter ramosis sitis; hyphopodiis carentibus; ascis ovalibus, 30-33 \times 20, 8-sporis; sporidiis oblongo-cuneatis, inæqualiter 2-cellularibus, 15-17 \times 6-7, cellula superiore demum subglobosa, c. 6 μ . longa, primitus hyalinis, demum fuscidulis; paraphysibus conglutinatiss.

Hab. ad folia *Licanie*, prope Pará Brasiliæ (C. F. BAKER).

— *Seynesia Schroeteri* Rehm, sporidiis multo minoribus diversa.

5. *Seynesia chilensis* Speg., Fungi Chilenses (1910) p. 107, cum icon. — Peritheciis hypophyllis sparsis, maculis subiculoque plane destitutis, superficialibus, dimidiato-scutatis, astomis, coriacellis, margine crenulatis, 250-400 μ . diam.; ascis mox diffluentibus; sporidiis elliptico-obovoideis mediocribus, 1-septato-constrictulis, fuliginis, 25-28 \times 12-14.

Hab. in foliis vivis *Eugenie* sp. in silvis Bahia de Corral

Chile Amer. austr. — Sec. Spegazzini l. c. p. 108 ad hoc genus spectat etiam *Lembosia Drymidis* (Lév.) Mont.

6. *Seynesia montana* (Racib.) Sacc. et Trott., *Trichopeltis montana* 5100 Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 378. — Peritheciis epiphyllis sub thallo inordinate nidulantibus tectis, subgloboso-depressis, 170-200 μ . diam. ostiolo minuto rotundato apicali præditis; thallo anguloso unistratoso e cellulis 5-10 \times 2,5-5 brunneonigris constituto, ad marginem longe lacinulato; ascis clavato-cylindræis, rectis v. curvulis, 36-50 \times 8-10, octosporis; sporidiis bilocularibus, levibus, longe ovoideis, 11-14 \times 3-4, pallide brunneis.
- Hab.* in foliis Vaccinii Teysmanniani in M. Gedeh et Pangerango in ins. Java. — Ob sporidia bilocularia brunnea potius *Seynesiæ* quam *Trichopelti* proxima.

7. *Seynesia scutellum* Syd. Ann. Mycol. VIII (1910) p. 40. — Peritheciis epiphyllis, maculiformiter aggregatis v. sine ordine distributis, sed maculis propriis nullis, orbicularibus, dimidiato-scutellatis, superficialibus, facile a folio secedentibus, 350-550 μ . diam., microthyrioideo-contextis, ambitu amœne fimbriatis, poro 12-18 μ . lato pertusis; ascis clavatis, subsessilibus, 50-70 \times 14-20, octosporis, aparaphysatis; sporidiis ellipsoideo-oblongis, utrinque obtusis, medio septatis vix constrictis, primo hyalinis, dein fuscis, 22-28 \times 7-10.

Hab. in foliis Drimydii piperitæ, Pauai 2100 m. alt. in provincia Benguet, Luzon, ins. Philipp. (R. C. Mc GREGOR).

8. *Seynesia brasiliensis* Spegazz., Fungi Paulist., Rev. Mus. La Plata 5102 t. XV, p. 29. — Subiculo epiphylllo quandoque vix evoluto arachnoideo quandoque membranaceo arcte matrici adhærente, plagulas suborbiculares 2-5 mm. diam. sæpe confluentes efformans, hyphis reticulato-intertexis septulatis 5-6 μ . cr., constituto; peritheciis laxè gregariis vix convexulis 250 μ . diam., ostiolo majusculo 25-30 μ . diam. pertusis, coriacellis opacis, contextu indistincto ambitu vix crenulato-fimbriato; ascis antice subtruncato-rotundatis crasseque tunicatis postice cuneatis breviter crasseque stipitatis, 80-100 \times 20-25, paraphysibus filiformibus vix longioribus densiuscule obvallatis; sporidiis oblique distichis uniseptatis, medio validiuscule constrictis, 24-25 \times 12, oculis subæquilongis, supero ovato obtusiore, infero subconoideo acutiore, diu hyalinis, postremo fuliginis.

Hab. ad folia coriacea arboris ignotæ cujusdam, Ipiranga até Cambucy Brasilia (USTERT).

Sect. 2. Hyalophragmiæ.

MICROPELTIS Mont. — Syll. II p. 669, IX p. 1069, XI p. 381, XIV p. 690, XVI p. 642, XVII p. 868.

1. **Micropeltis Wettsteinii** v. Höhnelt, *Ergeb. Bot. Exp. Südbras.* 1901, 5103
Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. p. 17.
— Peritheciis gregariis, non maculiculis, circinantibus, scutatis, margine denticulatis, nigris vel nigro-brunneis, nitidulis, opacis, carbonaceis, ostiolo 5-6 μ . lato, tenui-marginato, 400-500 μ . diam.; ascis numerosis, clavatis, supra rotundatis, basi in pedicellum tenuem nodoso-attenuatis, plerumque 40-48 \times 4-5, paraphysibus filiformibus simplicibus v. ramosis, 1-1,5 μ . cr. obsitis, octosporis; sporidiis plerumque distichis, hyalinis, elongato fusoides, utrinque acutatis, bilocularibus, demum quadrilocularibus, 9-10 \times 2,5-3.

Hab. in pagina sup. foliorum *Anemones Wettsteinii*, M. Itatiaya 1400-2000 m. alt. Brasilia.

2. **Micropeltis clavigera** Saccardo, *Fungi aliquot africana*, Bol. Soc. 5104
Broteriana v. XXI (1904-1905) p. 6. — Peritheciis epiphyllis laxe et late gregariis dimidiatis, omnino planis, ambitu circularibus 400-500 μ . diam., facillime secedentibus, opace nigris, ostiolo centrali impresso 35-40 μ . diam., pertusis, contextu minute celluloso non radiante, fuligineo-cyanescente, cellulis 4-5 μ . diam., margine tenuiter fimbriato, subreticulato; ascis oblongo-clavatis, breviter tenuato-substipitatis, apice obtusis, 150 \times 40, paraphysibus dense stipatis, hyalinis, copiosissimis, 1-1,5 μ . cr. obvallatis, octosporis; sporidiis cylindraceo-clavatis, tristichis, deorsum sensim notabiliter tenuatis, apice rotundatis, 72 \times 14-15, constanter 4-septatis, ad septa leviter constrictis, strato mucoso tenuissimo obvolutis.

Hab. in foliis languidis *Grewiæ coriaceæ* et *Hunteriæ* ambientis in Camaroes Africae occid. (Communic. A. MOLLER).

3. **Micropeltis Heteropteridis** Theiss., *Ann. Mycol.* VII (1909) p. 352. 5105
— Peritheciis epiphyllis, raris, sparsis, punctiformibus, subpulvinato-scutellatis, orbicularibus, atris, vix annulo minutissimo decolorato in folio circumdatis, poro pertuso, textura radiata, margine fimbriatis; ascis ovatis v. clavato-ventricosus, 8-sporis, c. 50-65 \times 28-35; sporidiis hyalinis oblongis, rectis, oblique monostichis, subdistichis, utrinque rotundatis, 3-6-septatis, ad septa vix constrictis, 22-28 \times 7,5-9.

Hab. in foliis vivis *Heteropteridis* sp. in silvula (*capao*),
Sao Leopoldo Rio Grande do Sul, Brasilia.

4. *Micropeltis corynespora* Saccardo, Fungi aliquot africana, Bol. Soc. 5106
Broteriana v. XXI (1904-1905) pag. 6. — Peritheciis epiphyllis,
sparsis, dimidiatis, plano-convexulis, ambitu circularibus, 600-800
 μ . diam., facile secedentibus, opace nigris, ostiolo centrali impresso
28 μ . diam., pertusis; contextu minute celluloso, non radiato, fu-
ligineo, ambitu fere integro, subcyanescenti; ascis clavatis, breviter
tenuato-stipitatis, 110-120 \times 18-22, octosporis, paraphysatis, apice
rotundatis; sporidiis subdistichis, clavatis, deorsum sensim notabi-
liter tenuatis, typice 6-septatis, constrictis, 55-60 \times 8, hyalinis.

Hab. in foliis languidis *Paxiæ calophyllæ* ex Connaraceis
in Camaroes Africae occid. (Communic. A. MOLLER). — A *Micro-*
peltide æruginosa differt sporidiis distincte clavatis, 6-septatis, cel-
lulis mediis non crassioribus, peritheciis poro subrotundo pertusis,
etc.; a *M. clavigera* mox dignoscitur sporidiis 6-septatis multo
minoribus, etc.

5. *Micropeltis albo-ostiolata* P. Henn., Hedwigia XLVII (1908) p. 268. 5107
— Peritheciis hypophyllis sparsis, dimidiato-scutellatis, atro-cel-
lulosis, ostiolis pertusis albis, ca. 200-220 μ . diam., hyphis fuscis
2-4 μ . cr., conidiis clavatis, fuscis 3-4-septatis, 40-50 \times 3-4; ascis
oblongo-ovoideis v. ellipsoideis, 8-sporis, 25-35 \times 10-13, paraphy-
sibus filiformibus, hyalinis, 0,5-1 μ . crassis; sporidiis subdistichis v.
conglobatis, clavatis, 3-septatis, constrictis, grosse guttulatis, 10-
13 \times 3-4.

Hab. in foliis Myrtaceæ, Amazonas, Rio-Juruá, Brasilia.

6. *Micropeltis Hirtellæ* P. Henn. Hedwigia XLVII (1908) p. 269. — 5108
Peritheciis gregarie sparsis hypophyllis, dimidiato-scutellatis, atro-
brunneis, reticulato-cellulosis, ostiolatis, margine fibroso-pallidis ca.
200-280 μ . diam.; ascis clavatis, rotundatis, curvulis, 8-sporis, 35-
45 \times 13-18; sporidiis substristichis v. conglobatis, subclavatis v. sub-
fusoides utrinque obtuso-rotundatis, 5-7-septatis, constrictis, hya-
linis 30-35 \times 5.

Hab. in foliis *Hirtellæ amazonicæ* Aubl., Amazonas, Rio
Juruá, Brasilia.

7. *Micropeltis Caunæ* Speg., An. Mus. Nac. Buenos Aires t. XIX 5109
(1909) p. 428. — Maculis nullis; peritheciis sparsis minutis non
nitentibus, amphigenis, solitariis, orbicularibus 150-200 μ . diam.,
stellatim dehiscentibus, ambitu integris, areola tenuissima hyalina
cinctis; ascis obclavatis tetrasporis, apice crasse tunicatis, basi bre-

vissime noduloseque pedicellatis, $70 \approx 18-20$, paraphysatis; sporidiis mediocribus clavulatis, 4-septatis $28-30 \approx 6,5-7$.

Hab. ad folia viva Pruni sphærocarpæ prope San Pedro, Misiones, Argentina America austr. — An *M. albo-marginatæ* Speg. tantum varietas?

8. *Micropeltis Reehingeri* v. Höhnelt, *Fragm. z. Mykol., Sitzb. k. Ak.* 5110 d. Wiss. Wien, Bd. CXVI, Abt. I (1907) p. 102. — Peritheciis epiphyllis, sparsis, opace brunneo-nigris, depresso-scutellatis ostiolo primum rotundato dein stellato præditis, breviter tenuiterque hyalino-marginatis, $280-300 \mu$. diam.; paraphysibus numerosis, filiformibus, mucosis; ascis octosporis, clavatis, sessilibus $32-44 \approx 10-11$; sporidiis distichis v. tristichis, hyalinis, quadrilocularibus, non constrictis, elongatis v. elongato-clavatis, utrinque tenuiter rotundatis, $13-18 \approx 3-4$.

Hab. in foliis ? *Spiræanthemi*, Utumapu Samoa (RECHINGER). — *M. leucoptercæ* Penz. et Sacc et *M. albo-marginatæ* Speg. affinis sed distincta.

9. *Micropeltis biseptata* v. Höhnelt, *Fragm. Mykol. VIII* (1909) in 5111 *Sitzb. k. Ak. d. Wiss. Wien, CXVIII, Abt. I*, p. 1168. — Peritheciis hypophyllis, sparsis, superficialibus, depresso scutatis, nigris, membranaceis, $120-140 \mu$. latis, ostiolo rotundato $15-20 \mu$. lato præditis, zonula nigro-brunnea $40-60 \mu$. lata limitato, margine irregulariter radiatim fibrosulis, olivaceo-brunneis; ascis fusoido-clavatis, supra rotundatis crasseque tunicatis, infra breviter acutatis et subventricosis, octosporis, $30-32 \approx 6-9$, paraphysatis; sporidiis distichis, hyalinis, utrinque rotundatis, elongato-clavatis, supra latoribus, biseptatis, ad septa non constrictis, $7,5-10 \approx 2-3$.

Hab. in foliis vivis *Paratropiæ* sp. in silvis prope Tjibodas in ins. Java. — *M. manaoensis* P. Henn. valde affinis.

10. *Micropeltis longispora* Earle, *Bull. of the New York Bot. Gard.* 5112 (1904) p. 311. — Epiphylla; peritheciis sparsis, facile secedentibus, obscure brunneis, rugulosis, $300-400 \mu$. cr., hemisphærico-applanatis, umbilicatis, ostiolo subcollabescente, contextu tenuiter prosenchymatico, fibrillis subiculum sterile applanatum $100-200 \mu$. lat. efformante; ascis ellipsoideis, paraphysatis, $70-80 \approx 25-30$; sporidiis cylindræis, sæpe curvulis, hyalinis, multiseptatis, granulosis, apice obtusis, $50-70 \approx 8$.

Hab. in foliis vivis *Coffeæ arabicæ*, Porto Rico (HELLER). — A *M. Tonduzii* Speg. differt sporidiis latoribus, magis septatis, loculis omnibus æqualibus.

11. **Micropeltis Vrieseæ** Rehm, Ann. Mycol. V (1907) pag. 531. — 5113

Peritheciis epiphyllis, dispersis, in centro maculæ orbicularis albedo-flavidulæ, ca. 1 mm. diam., tenuissime membranaceis, contextu prosenchymatico e cellulis 8-10 \times 5, radiantibus, dilute flavidulis conflato, singulis sessilibus, semigloboso-dimidiatis, æqualiter contextis, brunneis, poro pertusis, ca. 200 μ . diam.; ascis clavatis, apice rotundatis, 40-45 \times 9, octosporis; sporidiis fusiformibus, rectis, 3-septatis, haud constrictis, hyalinis, 15 \times 2,5, distichis; paraphysibus tenerrimis, ramosis, 1 μ . crassis.

Hab. ad folium Vrieseæ, Isola St. Catharina Brasilæ (ULE).

— A japonica *Micropeltide bambusicola* defectu mycelii effusi grisei recedit.

12. **Micropeltis Sirie** Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 380. 5114

— Peritheciis depressis, lenticularibus, nigris, 160-200 μ . diam. in maculis hypophyllis flavidis gregarie insidentibus, maturis ostiolo circ. 15 pilis peristomaticis rectis, acutis, 30 \times 3-4 circumdato, præditis, junioribus clausis; contextu e cellulis extus superne radiantibus formato, margine acute dentato, ambitu perithecorum non circulari sed sinuoso; ascis aparaphysatis, clavatis 40-46 \times 10, octosporis; sporidiis hyalinis, elongato-ovoideis, 14-15 \times 2,5-3, primum bilocularibus, dein 3-4-locularibus.

Hab. in foliis Cubebæ caninæ, prope Soenkanegara in Preanger, Java.

13. **Micropeltis Molleriana** Saccardo, Fungi aliquot africani, Bol. Soc. 5115

Broteriana v. XXI (1904-1905) pag. 6. — Peritheciis epiphyllis sparsis, dimidiatis, omnino planis, ambitu subcircularibus, 700-800 μ . diam., facile secedentibus, opace nigris et sæpe minute rugulosis, astomis; contextu minute celluloso olivaceo-fuligineo, cellulis 4-4,5 μ . diam., reticulato-seriatis (non radiantibus); peritheci marginem tenuissimo, eroso-fimbriato, hyalino; ascis obovoideis, utrinque rotundatis, sessilibus, 110-120 \times 50-55, paraphysibus intexto-fasciculatis, filiformibus, subhyalinis, 2 μ . cr. obvallatis; sporidiis tetrastichis, fusoides, sæpe curvulis, 80-86 \times 14-15, utrinque acutiusculis, e dilutissime flavido hyalinis, 3-septatis, medium interdum constrictulis.

Hab. in foliis languidis Thecacoridis Mannianæ ex Euphorbiaceis, Roça Bom Sucesso ins. S. Thomé, Junio 1885 (A. MOLLER). — Sporidiis magnis 3-septatis species statim dignoscitur.

14. **Micropeltis exilis** Schulz. in Flora (1877) p. 49. — Perexigua, 5116

gregaria; peritheciis dimidiatis, non sublinearibus nunc semiorbi-

cularibus v. scutiformibus, subrepandis, matrici non arcte adnatis, atris, poro rotundo pertusis, margine pori subelevato; ascis verticalibus aparaphysatis, crasse tunicatis, persistentibus, 5-6-sporis; sporidiis oblongo-subclavatis, triseptatis, nubiosis, hyalinis.

Hab. ad ramulos exsiccatos *Betulae albae*, *Eperies Hungariae*. — Var. *Carpini* Schulz. in *Flora* 1877, p. 50, t. II, t. 2. — Peritheciis punctiformibus 160 μ . diam., dimidiatis subsemiorbicularibus, nigris, tuberculosis, membranaceis, cortici arcte adhærentibus, poro rotundo v. elliptico apertis; ascis verticalibus, aparaphysatis, firmis, brevissime stipitatis, fere limoniformibus, 6-sporis; sporidiis cylindraceis utrinque rotundatis, 2-4-guttatis, constricto-1-septatis, 17-18 \times 4, hyalinis. — In ramulis *Carpini Betuli*, *Eperies Hungariae*. — Ubi sporidia didyma maneant vix *Micropeltis*.

15. *Micropeltis bambusina* v. Höhn., Sitzb. k. Ak. d. Wiss. Wien 5117 CXVIII, Abt. I (1909) p. 322. — Peritheciis sparse gregariis, depresso hemisphaericis subdiscoideis, nigris, nitidulis, 200-300 μ . lat., superficialibus, ostiolo rotundato 12-20 μ . lato; contextu tenui minute parenchymatico, opaco; raro 2-4 peritheciis stromatice adnatis; paraphysibus crassis numerosis, ascos superantibus, mucro conglutinatis; ascis clavato-fusoideis, supra attenuatis et obtusatis, 65-85 \times 10-12, tenuiter tunicatis, apice tantum incrassatis, octosporis, distichis v. tristichis, hyalinis, elongato-fusoideis, plerumque 6- raro 4-5-locularibus, 22-28 \times 4-5,5.

Hab. ad culmos *Bambusae*, Tjibodas in ins. Java. — *Micr. bambusicolæ* P. Henn. affinis sed differt sporidiis usque 4-septatis, majoribus, membrana marginali pallidiori.

16. *Micropeltis Bambusae* Pat., Bull. Soc. Mycol. de France, XXII 5118 (1906) p. 57. — Mycelio superficiali nullo; peritheciis in soros 1-2 cm. diam. approximatis, dimidiatis, convexis, atris, nitentibus, c. 300 μ . latis, contextu opaco, rigido, distincte radiato, poro centrali pertusis, sæpe umbilicatis; ascis fusoides, attenuato-stipitatis, 90-110 \times 12-14, octosporis; paraphysibus filiformibus, hyalinis, 1 μ . cr.; sporidiis oblique subdistichis, fusoides, utrinque acutis, hyalinis, transverse 5-septatis (rarius 3-septatis), haud constrictis, 22-27 \times 5-6.

Hab. in culmis *Bambusae*, Papeenoo Tahiti, Polynesia.

17. *Micropeltis ? javanica* (Rac.) Sacc. et Trott., *Heterochlamis javanica* Rac. Bull. Acad. Scienc. Crac. (1909) p. 381. — Mycelio hypophyllo, aereo primum radiatim se evolvente, nigro, ramosissimo,

setulis et hyphopodiis destituto; hyphis septatis 4-5 μ . cr. discum substromaticum nigrum laxiusculum efformantibus ad marginem nonnullis liberis et usque ad 80 μ . long.; peritheciis sub disco evolutis, 220 μ . diam. apice ostiolo 8 μ . diam. præditis; paraphysibus paucis filiformibus, brevibus; ascis cylindraceis, clavatis, basi angustatis, apice depresso-rotundatis, 68-75 \times 14-16, octosporis; sporidiis distichis, virguliformibus, clavulatis, rectis v. curvulis, 3-4-septatis, hyalinis (serius forsan obscure coloratis) levibus, 22-28 \times 4-6.

Hab. in foliis *Tetraceræ* sp. Buitenzorg Java.

SCUTELLUM Speg. — Syll. II p. 668, IX p. 1068, XVI p. 645.

1. *Scutellum microsporum* Speg., An. Mus. Nac. Buenos Aires t. XIX 5120 (1909) pag. 427, cum icon. — Maculis nullis; peritheciis sparsis arcte adnatis coriacellis, convexulis, 200-250 μ . diam., centro stellatim rimosis, ambitu subintegerrimis; ascis obclavatis brevissime minuteque pedicellatis 50 \times 10, octosporis, paraphysibus filiformibus apice leniter incrassatis subcircinatisque commixtis; sporidiis obclavatis, biseptatis, hyalinis, 12 \times 3-4, ad septa non constrictis; an serius fuseis?

Hab. ad folia viva *Moyæ* ferocis prope Sancelito, Jujuy, Argentina America austr. — Habitu ad lichenes vergens sed gonidia omnino nulla.

ACTINIOPSIS Starb. — Syll. XVI p. 543, XVII p. 871.

1. *Actiniopsis atro-violacea* P. Henn., Hedw. XLVII (1908) p. 269. 5121 — Peritheciis epiphyllis sparsis, scutellatis, atris, ca. 250 μ . diam., ad marginem setulis rigidis, numerosis, subulatis e hyphis atro-violaceis, c. 3 μ . crassis, apice hyalinis laxè conflatis, c. 200-400 \times 15-40; ascis clavatis vel subfusoides, 8-sporis, 120-140 \times 10-15; paraphysibus copiosis flexuosis filiformibus, hyalinis c. 2 μ . cr.; sporidiis subdi- v. subtristichis fusoides v. subclavatis, obtusiusculis, hyalinis, 9-11-septatis, constrictis, c. 50 \times 4-5.

Hab. in foliis *Tapuræ* sp., Iquitos, Peruvia.

2. *Actiniopsis congensis* P. Henn., in Fl. du Bas- et Moy-Congo, 5122 v. II, fasc. II (1907) p. 99. — Peritheciis hypophyllis superficialibus sparse gregariis, rotundato-subscutellatis, atro-cellulosis, c. 100-130 μ . cr., margine setulis numerosis subulatis, erectis connatis, rigidis, atris, septatis apice obtusis vel acutiusculis usque ad 300-400 \times 4-6 vestitis, basi hyphis repentibus, ramosis, fuscis, 2,5-

4 μ . cr. circumdatis; ascis clavatis vertice obtuso-rotundatis, 4-8-sporis, 60-80 \times 10-14; sporidiis parallelis cylindraceo-clavatis, superne obtusis, inferne subacutiusculis, pluriguttulatis dein 5-7-septatis haud constrictis, hyalino-cyanescentibus, 40-60 \times 3-3,5.

Hab. in foliis Psophocarpi palustris, Kisantu Congo, Afr. trop. (VANDERYST).

3. **Actiniopsis separato-setosa** P. Henn., Hedwigia XLVII (1908) 5123

p. 269. — Peritheciis epiphyllis sparsis v. gregariis subscutellatis ad marginem setosis, hyphis fibrosis radiatis circumdatis, conidiis ovoideis v. clavatis, fuscis 1-3-septatis, 20-30 \times 5-8, poro medio pertusis, cellulosis, atro-fuscis, c. 250-280 μ . diam., setulis simplicibus, rigidis, atro-fuscis, apice pallido obtusis, ca. 120-250 \times 5-6; ascis clavatis, obtuse rotundatis, 8-sporis, 90-140 \times 20-30; sporidiis parallelis, cylindraceis, utrinque obtusis, interdum, ad basim attenuatis, 20-26-septatis, constrictiusculis, hyalinis 70-100 μ .

Hab. in foliis Hirtellæ americanæ Aubl., Amazonas, Jurua-Miry, Brasilia.

ACTINOPELTIS v. Höhnelt, Ergeb. Bot. Exp. Südbres., 1901 in Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. p. 17 (Etym. *actin* radius et *pelte* scutum). — Perithecia superficialia, obturbinata non scutata, membranacea, radiatim cellulosa, ostiolo setulis circumdato. Asci clavati; sporidia multiseptata, hyalina. — A gen. *Micropeltide* peritheciis vertice corona setarum ornatis et convexo-conicis dignoscitur. — Prof. v. Höhnelt locat genus inter *Microthyriaceas*, sed perithecio alte convexo et subintegro non parum recedit. An potius *Sphaeriaceae*?

1. **Actinopeltis peristomalis** v. Höhnelt, l. c. p. 17, taf. I, fig. 3. — 5124

Peritheciis superficialibus, sparsis vel gregariis, nigris, tenuibus, brunneis, membranaceis, subiculo destitutis, crasse lenticularibus, turbinatis, 80-100 μ . lat., 50 μ . alt., supra depresso-conoideis, infra depresso squamiformibus, ceterum rotundato-subangulosis; ostiolo depresso, irregulariter rotundato, 12-16 μ . diam.; pilis brunneis, obtusis, septatis, horizontaliter patentibus usque ad 50 μ . long., 2-2,5 μ . cr., in seriem simplicem circulariter dispositis; paraphysibus indistinctis; ascis crasse clavatis, basi inflatis, supra rotundatis, crasse tunicatis, octosporis; sporidiis di- v. tristichis, hyalinis, rectis v. leniter curvulis, cylindraceo-fusoideis, utrinque acutatis, transverse 5-septatis, circ. 20 \times 4.

Hab. in frondibus Filicis cujusdam, Raiz da Serra prope San-

tos, Sao Paulo Brasilia. — *Socia Hyphonectria byssiseda*. Ad hoc novum genus verisimiliter pertinet etiam *Micropeltis Alang-Alang* Racib.

Sect. 5. Hyalodictyæ.

SACCARDINULA Speg. — Syll. IX p. 1071, XIV p. 692, XVI p. 645.

1. *Saccardinula tahitensis* Pat., Bull. Soc. Mycol. Fr. XXII (1906) 5125
p. 55. — Mycelio epiphylllo, subpelliculoso, maculas fuscas, sub-orbiculares, 3-10 mm. diam. efformantibus ex hyphis intricatis, articulis cylindraceis 10-20 \approx 4-6 fumosis composito; peritheciis superficialibus, sparsis, atris, umbilicatis, ostiolo minuto 60 μ . diam. pertusis, membranaceis, contextu e cellulis 10-20 μ . latis, inordinatis; ascis elongatis 80 \approx 25, apice rotundatis deorsum attenuatis, substipitatis, octosporis, aparaphysatis; sporidiis cylindraceo-ellipsoideis, rectis utrinque obtusis, 28-39 \approx 8-10, hyalinis, 3-5-septatis ad septa constrictulis, loculis mediis septo altero longitudinali divis, primitus tunica mucosa obvolutis dein nudis.

Hab. ad folia viva *Coffeæ* nec non *Psidii*, Tahiti Polynesia. — *S. costaricensi* Speg. sed ascis elongatis et sporidiis minus frequenter septatis.

2. *Saccardinula Usteriana* Spegazz., Fungi Paulist., Rev. Mus. La 5126
Plata t. XV, p. 30, fig. H. — Subiculo nullo v. vix manifesto; peritheciis sæpius hypophyllis sparsis v. hinc inde laxè gregariis hemisphærico-peltatis 100-120 μ . diam., convexulis coriacellis contextu indistincto, centro per ætatem stellatim dehiscentibus, margine fimbriatulis atque subiculo tenuissime parcissimoque toruloso-celluloso cinctis; ascis antice obtusissime rotundatis crassiusculeque tunicatis postice subrotundato-cuneatis brevissime crasseque pedicellatis 50-60 \approx 20-40, aparaphysatis, octosporis; sporidiis conglobatis elliptico-fusoideis utrinque obtusiusculis primo dense cribroso-guttulatis, 35 \approx 10-12, tunica crassissima, 5 μ . cr., mucosa hyalina vestitis dein transverse 7-septatis, ad septa constrictis, præcipue ad medium, loculis septis longitudinalibus 1 vel 2 divis, 25-28 \approx 8-10, hyalinis.

Hab. ad folia coriacea *Coffeæ* et *Myrtacearum* in Horto bot. Sao Paulo, Brasilia (USTEAR). — Species vulgata videtur, sporidiis mucoso-vestitis mox dignoscenda.

Sect. 6. Phæodictyæ.

PHÆOSACCARDINULA P. Henn. — Syll. XVII p. 873.

1. *Phæosaccardinula ficicola* P. Henn., Engl. Jahrb. XXXVIII (1905) 5127 pag. 114. — Maculis fuscidulis, effusis; peritheciis superficialibus sparsis, dimidiato-scutellatis, c. 200-300 μ . diam., contextu atro-cœruleis v. fuscis, radiato-cellulosis, hyphis radiantibus ramosis, septatis, hyalinis v. fuscis, 2-3,5 μ . circumdatis; ascis ovoideis v. clavatis, vertice obtusis, subtunicatis, octosporis, 40-55 \times 18-30, paraphysibus sparsis, filiformibus, flexuosis, hyalinis; sporidiis conglobatis, oblonge clavatis, rectis v. subcurvulis, obtusis, 7-8-septatis, muralibus, primo hyalinis dein fuscis, cellulis constrictis, 20-30 \times 6-9.

Hab. in foliis *Fici* sp. Amani, Usambara orient. Africae centr. (ZIMMERMANN).

Sect. 7. Scolecosporæ.

SCOLECOPELTIS Speg. — Syll. IX p. 1072, XIV p. 646, XVII p. 874.

1. *Scolecopeltis dissimilis* Rehm in Theissen, Ann. Mycol. (1910) 5128 p. 462, cum icon. — Peritheciis hypophyllis, sparsis, rotundato-scutellatis, atris, 200-270 μ . diam., medio collapsis, ambitu annulo fusco-lanoso cinctis, contextu non radiato; ascis late elliptico-saccatis, pedicello brevi contracto, supra late rotundatis, 75-85 \times 42-45; sporidiis in asco parallelis, longitudine fere asci, 55-75 \times 6 $\frac{1}{2}$, hyalinis, rectis v. leniter curvis, 10-15-septatis, non v. vix constrictis (articulis secedentibus?).

Hab. in foliis in Brasilia. (Indicatio matricis et loci l. c. desideratur!).

2. *Scolecopeltis trivialis* Raciborski, Bull. Ac. Sc. Cracovie (1909) 5129 p. 381. — Peritheciis nigro-carbonaceis, semilenticularibus, nitidis in hypophyllo irregulariter sparsis, ostiolo apicali præditis, 0,6-1 mm. latis; paraphysibus filiformibus, numerosissimis; ascis elongato-cylindraceis, apice rotundatis, sæpe depresso incurvatis, 140-165 \times 12, octosporis; sporidiis junioribus fusoideis, distichis, medio profunde constrictis, demum in loculos binos secedentibus; loculis singulis subclavatis, hyalinis, 16-21 \times 6, in eodem asco demum 2-3 transverse septatis.

Hab. epiphytice in *Trentepohlia* ad folia arborum variarum, Buitenzorg, Depok, Tjampea, Tjibodas in ins. Java.

Subgen. *Scolecopeltopsis* v. Höhn. — Perithecia superne circumcirca ala membranacea cincta.

3. *Scolecopeltis transiens* (v. Hohn.) Sacc. et Trott, *Scolecopeltopsis* 5180
transiens v. Höhn., *Fragm. zur Mykol.* (1909) VIII in Sitzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, p. 1186. — Peritheciis hypophyllis, sparsis, nigris, nitidulis obscure cyaneo leniter tinctis, tenuissime albo-marginatis, depresso scutatis, in sicco rugosulis usque ad 600 μ . latis, supra carbonaceo contextis insra tenuiter hyalino contextis, ostiolo subrotundo 8-10 μ . lato margine in alam membranaceam 200 μ . latam sensim tenuiore cyaneo-atram ambituque hyalinam abeunte; ascis numerosis sessilibus fusoideo-clavatis apice tenui tunicatis basi in cuneatis pseudoparaphysatis octosporis; sporidiis di-tristichis primitus oblongo-clavatis deinde cylindraceis hyalinis utrinque rotundatis v. acutulis tandem 6-8-cellularibus constrictisque 40 \times 6, facile in articulos secedentibus.

Hab. in pagina inf. foliorum vivorum *Paratropiæ* spec. in silvis prope Tjibodas in ins. Java (v. HÖHNEL) et in foliis *Paysonæ* sp. Depok Java (RACIBORSKI). — Ad hoc subgenus quoque *Scolecopeltopsis æruginea* (Zimm.) v. Höhn., *Fragm. Mykol.* VI n. 218, p. 42, *Scolecopeltis æruginea* Zimm. — Syll. XVII, p. 874.

Subfam. 2. Asterineæ.

Sect. 1. Hyalosporæ.

ASTERULA Sacc. — Syll. I p. 47, IX p. 375, XI p. 254, XIV p. 692, XVI p. 646.

1. *Asterula Bruinsmai* Koord., *Botan. Untersuch.* (1907) pag. 171, 5181
 fig. 10 et taf. XII, fig. 17. — Peritheciis subdiaphanis, atris, sparsis, in mycelio atro subsuperficiali insidentibus, appanato-lenticularibus, 90-110 μ . diam., ostiolo circulari instructis; ascis clavatis; apice rotundatis, octosporis, 20-25 \times 9-10; sporidiis continuis, hyalinis, fusiformibus, utrinque obtusis v. rotundatis, rectis, 10-13 \times 3,25-3,50, biseriatis; paraphysibus nullis.

Hab. in foliis emortuis *Fici elasticæ* prope Penunggalan prov. Kedu ins. Java (KOORDERS).

Sect. 2. Hyalodidymæ.

ASTERELLA Sacc. — Syll. I p. 42, IX p. 393, XI p. 256, XIV p. 698, XVI p. 649, XVII p. 882.

1. **Asterella Rubi** (Fuck.) v. Höhnelt, Ann. Mycol. (1905) pag. 326, 5132
Actinonema Rubi Fuck., *Asteroma Rubi* (Fuck.) Sacc. — Syll. III, p. 202. — Peritheciis subrotundis, scutatis, 160 μ . diam., membranaceis e cellulis inordinate dispositis, brevibus, irregulariter sinuosis efformatis, olivaceo-brunneis, in subiculo matrici arcte adnato maculiformi tenui-membranaceo superficialibus; subiculi hyphis brunneis, rigidulis, 3-4 μ . cr., reticulatim connexis cellulisque parenchymaticis interpositis; ascis 8-15 pluribusve, oblongo-ovoideis, octosporis, brevissime stipitatis, 24-28 \times 8-12; sporidiis 2-3-seriatis, bicellularibus, hyalinis, 9-12 \times 3-4, ad septum non constrictis, cellula superiore brevior et latior; paraphysibus, brevibus, nodulosis, curvis.

Hab. in ramentis vivis *Rubi* idæi in Helvetia (MORTIER), Austria (v. HÖHNEL). — Var. *rhoina* v. Höhn., l. c. — A typo maculis obsoletis, peritheciis et ascis paullo minoribus differt. — In ramulis vivis *Rhois* Cotini in Wiener Wald Austriæ (v. HÖHNEL).

2. **Asterella multiplex** (Rehm) Sacc. et Trott., *Asterina multiplex* 5138
Rehm, Ascom. exsicc. n. 1706, (1907) et Ann. Mycol. V (1907) p. 209. — Peritheciis in maculis epiphyllis orbicularibus, in ambitu subfibrillosis nigris, 3-4 mm. latis, sæpe confluentibus gregarie sessilibus, globulosis, parenchymatice centrifuge contextis, radiatim ad basim in hyphis mycelii septatis, subfuscis, 4-5 μ . cr., sessilibus, glabris, fusco-nigris, in apice demum stellatim apertis, senilibus rugulosis; hyphopodiis mycelii perraris, alternantibus, lobulatis, parvulis, setulis erectis subcurvatis, apice subobtusis, subfuscis, c. 150 \times 8-9 ad basim perithecii sessilibus; ascis ovoideis, crasse tunicatis, 50-60 \times 45-50, octosporis; sporidiis ovoideis medio septatis et constrictis, hyalinis, 20-25 \times 10-12; paraphysibus ramosis 2-3 μ . cr.

Hab. in pagina sup. foliorum *Styracis*, Sao Leopoldo Rio Grande do Sul, Brasilia (Prof. J. RICK).

3. *Asterella Missionum* Speg., An. Mus. Nac. Buenos Aires t. XIX 5184 (1909) p. 428. — Plagulis orbicularibus, sæpius epiphyllis 3-5 mm. diam., atris, subepelliculosis, glabris; peritheciis prosenchymaticis suborbicularibus 120-150 μ . diam., dimidiato-scutatis, astomis, atris, opacis; ascis ellipsoideis utrinque rotundatis apice crasse tunicatis, basi crasse breveque umbonato-pedicellatis 70-80 \times 30-35, octosporis, pseudoparaphysatis; sporidiis subclavulatis didymis, 40 μ . long. loculis inæqualibus, supero 18 \times 15-16, infero 22 \times 12, hyalinis, conglobatis.

Hab. ad folia viva Pruni, Symploci nec non Ilicis, in silvis prope Campina de Americo, Misiones, Argentina, America austr.

4. *Asterella Erithalidis* Ell. et Ev. in Millsp. Publ. Field Columb. Mus. Bot. II n. 1 (1900) p. 15, t. 50. — Hypophylla; mycelio laxo paginam sup. foliorum occupante, sed maculas vix formante; filamentis reticulato-ramosis; hyphopodiis capitatis obovatis, 15-20 \times 5; hyphopodiis mucronatis elongato-conicis, 12-15 \times 5-6; setis e mycelio orientibus, 150-250 \times 5; peritheciis globoso-membraneis, subastomis, 80-100 μ . diam.; ascis oblongis, 20-30 \times 8-10; sporidiis subdistichis, oblongis, 1-septatis, hyalinis, vix constrictis, 6-8 \times 3-3,5.

Hab. in foliis *Erithalidis angustifoliæ* in insula Grand Cayman Antillarum.

5. *Asterella virescens* (Spegazz.) Sacc. et Trott., *Asterina virescens* 5186 Spegazz., Fungi Paulist., Rev. Mus. La Plata t. XV, p. 28. — Peritheciis epiphyllis, astomis radiatim dehiscentibus, margine vix repandulis, 200-220 μ . cr., contextu minutissime parenchymatico radiante olivaceo subopaco, areola hypothallina latiuscula oculo nudo sordide albescente, sub lente e cellulis cuboideis seriatim radiantibus grosse 1-guttulatis constitutis, cinctis; ascis subcylindraceis antice obtusissime rotundatis, parum infra medium leniter incrassatulis, postice cuneatis breviuscule pedicellatis, 80 \times 10, paraphysibus filiformibus vix longioribus apice minute incrassatulis, obvallatis, octosporis jodi, ope nulla; sporidiis oblique distichis utrinque obtusiusculis 16-20 \times 4, medio 1-septato-constrictis, loculis diblastis, hyalinis.

Hab. ad folia viva *Bignoniaceæ* cujusdam, *Ipiranga* Cambucy Brasilia (USTERI). — Species sat dubiusa hypothallo lichenino sed gonidia non visa.

6. *Asterella olivacea* v. Höhn. in Rehm, Ann. Myc. III (1905) p. 326 5187

et Ascom. exsicc. n. 1623. — Peritheciis sparsis, tenui-membraneis, 150-190 μ ., depresso scutatis, olivaceo-virentibus, astomis, contextu parenchymatico, sed non radiato, cellulis 2-4 μ . diam., margine primitus tenuiter hyalino-fimbriatis; ascis globoso-ovoides, 25 \times 12-18, sursum crasse tunicatis, octosporis, apapophysatis; sporidiis oblongis, utrinque rotundatis, tenui-tunicatis, hyalinis, medio leviter constrictis septatisque, 9-12 \times 4-5, interdum articulis secedentibus.

Hab. in foliis adhuc viridibus Buxi sempervirentis intra Speluncam pr. Erisa in ins. Corsica (v. HÖHNEL). — Ob subiculi defectum, potius est *Microthyrii* sp., sed contextus perithecii, teste v. Höhnel, *Asterellæ*. An recte hujus loci?

7. *Asterella tenuissima* (Petch) Sacc. et Trott., *Asterina tenuissima* 5188 Petch, Ann. Roy. Bot. Gard. Peradenya III (1906) Pt. I, p. 1. — Tenuissima late effusa, maculam nebulosam in ramulis et fructibus formans; hyphis repentibus brunneis, 4-5 μ . diam., glabris, in stratum mucosum deinde junctis, multas erectas, septatas, olivaceas, acutas hyphas, 90-100 μ . gerentibus; peritheciis applanatis, nigris, 130-160 μ . diam., ostiolatis; ascis clavatis, 30-40 \times 9-12; sporidiis uniseptatis, constrictis, hyalinis, fusoides, 13 \times 4.

Hab. in ramulis vivis fructibusque Heveæ brasiliensis Ceylon. — An *Aster. nubecula* B. et Br.?

8. *Asterella aliena* (Ell. et Ev.) Sacc. et Trott., *Asterina aliena* Ell. 5189 et Gallow. in Ell. et Ev., North Amer. Pyr. (1892) p. 36. — Mycelio crustaceo maculas subellipticas 0,5-1 \times 0,2-0,5 cm. brunneo-marginatas distincte limitatas efformante; peritheciis amphigenis, lenticularibus, subconfluentibus, 150-200 μ . diam., celluloso-fibrosis et margine reticulato-fimbriato præditis; ascis primum ovoides, deum subelongatis 50-60 \times 20, breviter stipitatis, octosporis; sporidiis inordinatis, obovodeis, granulosi, hyalinis (dein uniseptatis?) 13-15 \times 4-5.

Hab. in foliis Ananassæ sativæ cultæ, Washington D. C. Americæ bor.

Sect. 3. Phæodidymæ.

ASTERINA Lév. — Syll. I p. 39, IX p. 379, XI p. 255, XIV p. 693, XVI p. 646, 1141, XVII p. 875.

1. *Asterina Derridis* P. Henn., Hedwigia XLVII (1908) p. 260. — 5140

Peritheciis hypophyllis gregariis in maculis atris effusis, dimidiato-scutellatis, radiato-cellulosis, brunneis, poro pertusis 70-90 μ ., hyphis radiatis, ramosis, septatis, fusco-brunneis, 3-3,5 μ . circumdatis; ascis ellipsoideis v. ovoideis, vertice tunicatis, 8-sporis, 20-30 \times 20-25; sporidiis conglobatis ovoideis v. ellipsoideis, 1-septatis, constrictis, hyalinis deinde fuscidulis granulatis, 11-16 \times 6-8.

Hab. in foliis *Derridis uliginosæ*, Mindanao, Davao ins. Philippin. (COPELAND).

2. **Asterina Combreti** Syd., Engler's Bot. Jahrb. 45. Bd. (1910) p. 264. 5141

— Maculis mycelii plerumque epiphyllis, rotundatis v. effusis, 2-4 mm. diam.; mycelio ex hyphis repentibus varie ramosis anastomosantibus parce septatis 3,5-4,5 μ . cr., hyphopodia alternantia, 1-septata, brevi-stipitata, c. 8-10 μ . longa, 4-5 μ . cr. gerentibus composito; peritheciis gregariis, punctiformibus, atris, amœne radiatim contextis, stellatim dehiscentibus, 90-175 μ . diam.; ascis globosis, subglobosis v. ovatis, 28-40 \times 28-32, octosporis, aparaphysatis; sporidiis conglobatis, oblongis, utrinque rotundatis, medio 1-septatis et constrictis, primo hyalinis dein brunneis, 14-19 \times 8-11; pycnidiis ad genus *Asterostomellam* pertinentibus, eadem forma et structura ut perithecia sed paullo minoribus; sporulis ellipsoideis v. piriformibus, continuis, brunneis, 18-21 \times 10-13.

Hab. in foliis *Combreti tavei*ensis, Kibwezi Africa trop. britannica (SCHEFFLER).

3. **Asterina Sidæ** Earle, Bull. N. York Bot. Gard. III (1904) p. 310. 5142

— Plerumque epiphylla, maculas indefinitas, tenues, nigricantes 2-4 mm. diam. efformante; mycelio angusto, e filamentis zigzag formiter radiantibus 4 μ . cr. constituto; hyphopodiis sessilibus, irregulariter et conspicue 3- v. 4-lobatis, 7-8 μ .; peritheciis numerosis, sparsis, 80-100 μ . diam., convexo-applanatis, ex hyphis obscuris, opacis, fortiter conglutinatibus radiantibus, subostiolatis, lacerato-stellatis; ascis subglobosis, octosporis, 20-25 μ . diam.; sporidiis inordinatis, ovoideis subinæqualiter uniseptatis, fortiter constrictis, fuliginosis, 14 \times 8.

Hab. in foliis vivis *Sidæ carpinifoliæ*, Jamaica (EARLE), Porto Rico (HELLER).

4. **Asterina Balansæ** (Speg.) Sacc. et Trott., *Seynesia Balansæ* Speg. 5143

— Syll. IX, p. 1065 — var. *macrocarpa* Speg., Fungi Paulist., Rev. Mus. La Plata t. XV, p. 28 (*Asterella*). — A typo recedit ascis majoribus angustioribusque, 50-60 \times 20-25; sporidiis elliptico-obovatis 20 \times 10, loculis subæquilongis, supero ovato obtuso, infero

conoideo acuto, primo hyalinis dein plus minusve intense fuliginis.

Hab. ad folia Melastomataceæ cujusdam prope Ipiranga Brasilæ (USTERI).

5. *Asterina Mate* Speg., Ann. Mus. Nac. Buenos Aires t. XVII (1908) 5144 p. 130, XIX (1909) pag. 428, cum icon. — Subiculo parcissimo, plagulas tenuissimas orbiculares 3-7 mm. diam., sæpius hypophyllas subnubilosas fuscas constituyente; peritheciis laxè gregariis grosse parenchymatico-cellulosis, latissime fimbriato-ostiolatis, 100 μ . diam.; ascis subglobosis, 3-8 in quoque perithecio, superne rotundatis crasseque tunicatis basi subcuneatis brevissime pedicellatis 50-70 \times 40-50, octosporis, aparaphysatis; sporidiis conglobatis cylindræis utrinque rotundatis, 38-40 \times 16-18 ad septum constrictis, grosse 1-guttulatis, primo hyalinis dein fuliginis.

Hab. ad folia viva Ilicis paraguariensis prope San Pedro, Misiones, Argentina America austr.

6. *Asterina echinospora* v. Höhn., Fragm. z. Mykol., X (1910) in 5145 Sitzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, p. 440. — Plagulis nigris, 2-3 mm. latis, rotundatis, bene limitatis, sparsis, epiphyllis; subiculo arcte adnato, tenui, ex hyphis brunneis 4-6 μ . lat. laxè ramoso-reticulatis constituto; hyphopodiis unilocularibus elongatis, 10 \times 4-5; peritheciis cæspitosis, fortiter convexis medio sæpe umbilicatis, nigris, subcircularibus, 150-240 μ . latis; paraphysibus nullis; ascis ovoideis, basi acutatis, extus leniter mucosis, octosporis, 44-48 \times 36; sporidiis brunneis, bilocularibus, crebre hyalino-aculeolatis, utrinque rotundatis, loculo inferiori angustiore, ad septum constrictis, 26-29 \times 12-14.

Hab. in foliis Cansjeræ Rheedii, Ceylon (THWAITES). — *Asterinæ Loranthacearum* Rehm præcipue affinis.

7. *Asterina crustacea* (Ell. et Ev.) Sacc. et Trott., *Asterella crustacea* Ell. et Ev. in Millspaugh, Publ. Field Columb. Mus. Bot. II (1900) n. 1, p. 15, t. 51. — Epiphylla; mycelio subcrustoso, maculas orbiculares nigras 2-3 mm. diam., formante, ramoso-reticulato, sine hyphopodiis et setis; peritheciis lenticularibus, tenuibus, applanatis, 0,5 mm. diam., ostiolo papillato, subinde compresso; ascis clavato-oblongis, subsessilibus, 70-80 \times 15-20; sporidiis obpiriformibus 1-septatis, initio hyalinis et strato hyalino obvolutis demum brunneis, constricto-1-septatis, cellula superiore elliptica et latiore, inferiore obconica.

Hab. in foliis Psidii Guajava in insula Grand Cayman Antillarum.

8. *Asterina leopoldina* Rehm, Ann. Mycol. V (1907) p. 521. — Mycelio hypophyllo, plagas orbiculares, demum confluentes, 2 cm. lat., formante, arachnoideo, nigrescente, ex hyphis centrifugis, rectangulariter ramosis, undulatis, subfuscis, septatis, 4-5 μ . lat., tenuissimis formato, hyphopodiis singulis, lobulatis, 9 μ . lat. et alt., simplicibus obsesso; peritheciis in centro macularum mycelii dispersis, semiglobosis, ad marginem centrifuge dendriticis, fuscidulis, glabris, poro demum stellatim expanso, 180-300 μ . diam.; ascis clavatis, apice crasse tunicatis, 80 \approx 30, octosporis; sporidiis clavatis, 2-cellularibus, cellula superiore latiore, medio subconstrictis, hyalinis, dein fuscidulis, 25-30 \approx 10-12; paraphysibus 4 μ . cr. septatis conglutinatis.

Hab. ad folia Myrtaceæ, Sao Leopoldo, Rio grande do Sul, Brasilia (RICK S. J.).

9. *Asterina dispar* Speg. — Syll. IX, p. 384 — var. *paraphysata* Speg., Fungi Paulist., Rev. Mus. La Plata t. XV, p. 27. — Ascis obovatis, 60-80 \approx 30-40, paraphysibus submucosis obvallatis, sporarum loculo supero sphaerico 16 \approx 16, infero conoideo 12 \approx 10, acutiusculo, adhuc hyalinis visis.

Hab. ad folia viva Myrtaceæ cujusdam in hortis Sao Paulo Brasilia (USTERI).

10. *Asterina typhospora* R. Maire, Ann. Mycol. VI (1908) p. 148, fig. 4. — Mycelio epiphylllo, plagas atras, orbiculares v. ellipticas, sæpe confluentes, 2-5 mm. diam., efformante, arachnoideo; hyphis brunneis, 5-6 μ . diam., rectis, vel rarius flexuosis, plus minusve rectangulariter ramosis et anastomosantibus, septatis; hyphopodiis perraris, globosis, unicellularibus, sessilibus, 6 μ . diam.; haustoriis dendroideis, intra cellulas hypodermatis ramosis; peritheciis scutatis, atris, glabris, ostiolo centrali circulari pertusis, contextu prosenchymatico radiante, margine hyphis contortis fimbriatis; ascis octosporis clavatis, apice crassius tunicatis, 90-105 \approx 28-30; sporidiis 36-40 \approx 16-18, clavatis v. obovato-clavatis, levibus, ex hyalino fuligineo-brunneis, uniseptatis, cellula superiore globosa v. subglobosa, latiore, cellula inferiore angustiore, cylindracea v. clavata, recta v. curvula, longitudine cellulam superiorem æquante v. paulum superante; paraphysibus conglutinatis parum evidentibus.

Hab. in foliis vivis Myrtaceæ cujusdam, Mandagui prope Sao Paulo, Brasilia.

11. *Asterina ? megalosperma* Speg., Fungi Paulist., Rev. Mus. La Plata t. XV, p. 27. — Maculis nullis; peritheciis hinc inde laxè gregariis astomis, 250 μ . cr., scutatis centro radiato-fimbriatis dehiscentibus, subiculo nullo v. parcissimo cinctis, contextu subindistincto brevissime prosenchymatico; ascis paucis substantia mucoso-parenchymatica hyalina comitatis, antice obtusissime rotundatis, postice breviter cuneatis, pedicello parvulo nodulosoque suffultis 60-70 \times 40-50, crasse tunicatis, octosporis; sporidiis globatis rectis v. curvulis utrinque subacutato-rotundatis, 35-40 \times 11-15 levibus, loculis facillime secedentibus, hyalinis (an demum fuliginis?).

Hab. ad folia coriacea Myrtacearum quarumdam circa Ipiranga Brasilia (USTERI).

12. *Asterina pontica* Bub. in Handel-Mazzetti Bot. Reis. Pont. Randoeb. in Ann. Naturhist. Hofmus. Wien (1909) XXIII, p. 102, t. V, f. 1 a-f. — Peritheciis ramicolis, diffusis v. aggregatis, initio subepidermicis, dein nudis, rotundatis, v. irregulariter rotundatis, planis, discoideis, nigris, opacis, centro paulum concavis, hinc poro brevi, conico apertis, contextu radiato, castaneo-brunneo, 200-400 μ . lat.; ascis oblongis, 30-45 \times 22-25, ad apicem valde attenuatis flexuosisque, octosporis; sporidiis oblongis, 12-15 \times 4-4.5, medio uniseptatis, loculo inferiore paulo crassiore, utrinque attenuatis, subdistichis, olivaceo-brunneis.

Hab. in ramis *Daphnes ponticæ* var. *Szowitzii* et *D. glomeratæ* in montibus ponticis Anatoliæ.

13. *Asterina Lorantheæ* Rehm, Ann. Mycol. V (1907) p. 522. — Maculis hypo- et epiphyllis, orbicularibus, nigris, tenuissimis, 3-5 mm. diam.; peritheciis globosis, in medio maculæ creberrime sessilibus, poro pertusis, glabris, tenuiter parenchymatico-contextis, fusco-nigris, 70-100 μ . diam., demum stellatim apertis, in mycelio hypharum paucarum fuscæ septatarum, 4-5 μ . latorum, hyphopodia alternantia oblonga 7-10 \times 4-5, interdum bicellularias gerentium sessilibus; ascis ovalibus crasse tunicatis, 30 \times 20, octosporis; sporidiis clavatis, 2-cellularibus, medio subconstrictis, demum subfuscis et scabriusculis, 20 \times 10; conidiis ellipsoideis, subfuscis, 3-septatis, 18-20 \times 5-6.

Hab. in foliis *Loranthæ*, Sao Leopoldo, Rio Grande do Sul, Brasilia (BICK S. J.). — Perithecia ægre conspicua.

14. *Asterina Strophanthi* P. Henn., Engl. Jahrb. XXXVIII (1905) p. 125. — Maculis subfuscis; peritheciis epiphyllis gregariis

lenticularibus, atro-castaneis, radiato-cellulosis, 70-120 μ . diam., margine pallidiori, hyphis repentibus, ramosis, septatis, atro-fuscis, 2,5-3,5 μ . cr., conidiis ovoideis, basi apiculatis, atro-brunneis 18-22 \times 10-13; ascis ellipsoideis v. ovoideis, vertice tunicatis, 8-sporis, 25-38 \times 18-22; sporidiis conglobatis ovoideis, primo hyalinis, medio 1-septatis, valde constrictis, 13-16 \times 7-8, atro-brunneis.

Hab. in foliis *Strophanti hispidi*, Lome Togo Africae centr. (WARNECKE). — Status conidiophorus: cfr. *Asterostomella Strophanthi*.

15. *Asterina kwangensis* P. Henn., in Fl. du Bas- et Moy.-Congo, 5154 Ann. Mus. du Congo v. II, fasc. II (1907) p. 99. — Peritheciis dense gregariis plerumque epiphyllis, lenticularibus v. subdiscoideis, atris, contextu radiato-fibrilloso, centro pellucido, radiato-lobato-dehiscensibus c. 90-120 μ . diam., hyphis radiantibus, ramosis, atro-fuscis, c. 3-4 μ . cr. circumdatis, pseudopodiis ovoideis, murali-divisis 10-12 \times 5-8; ascis ovoideis rotundato-obtusis subtunicatis 8-sporis, 18-25 \times 15-20; sporidiis conglobatis ellipsoideis, medio valde constrictis, atro-castaneis, 12-15 \times 5-7.

Hab. in foliis *Asclepiadaceæ* cujusdam, Kisantu Congo, Afr. trop. et in foliis *Malvaceæ*, Boko Sainte-Barbe Congo, (VANDERYST).

16. *Asterina triloba* Earle, Bull. New York Bot. Gard. III (1904) 5155 p. 310. — Epiphylla, maculas nigras 2-4 mm. diam. sæpe confluentes efformante; mycelio subangusto, ex filis fuscis, 4 μ . circ. cr., hyphopodiis sparsis, sessilibus, irregularibus, sed plerumque trilobatis, 7-8 μ . circ. cr.; peritheciis copiosis, scutatis, ex fibrillis radiantibus, nonnullis marginem excedentibus et subiculum *Lembosicæ* simile efformantibus, 30-50 μ . lat., stellatim disrumpentibus 90-120 μ . diam.; ascis e late ovoideis suborbicularibus, circ. 25-30 μ .; sporidiis maturis hyalinis dein obscure brunneis, subæqualiter uniseptatis, constrictis, ellipsoideis, apice obtusis, circ. 20-25 \times 8-9.

Hab. in foliis vivis *Crotonis discoloris*, Limestone Hills, Porto Rico (HELLER). — *Ast. crotonicolæ* Pat. similis sed hyphopodiis trilobis, sporidiis minoribus diversa.

17. *Asterina Usterii* R. Maire, Ann. Mycol. VI (1908) p. 146, fig. 3, 5156 tab. I, fig. 2. — Mycelio epiphylllo, plagas atras, orbiculares vel ellipticas, sæpe confluentes, 2-5 mm. diam., efformante, arachnoideo-reticulato; hyphis fuscis, 3-5 μ . diam., rectis vel rarius flexuosis, rectangulariter ramosis et anastomosantibus, septatis; hyphopodiis numerosis, alternis, globosis v. subglobosis, unicellularibus,

sessilibus, alternantibus, 4-5 μ . diam.; haustoriis in cellulis epidermatis, rarius hypodermatis dense ramosis, ramis conglobatis; peritheciis scutatis, aterrimis, subcarbonaceis, glabris, ostiolo centrali circulari pertusis vel subastomis, irregulariter dehiscens; contextu prosenchymatico radiante, margine hyphis rectis fimbriatis; ascis octosporis ovoideis vel ellipsoideo-oblongis, 33-40 \times 13-23, apice crassius tunicatis; sporidiis distichis vel conglobatis, 15-21 \times 6-10, clavatis vel obovato-clavatis, medio septatis et valde constrictis, levibus vel minutissime rugulosis, ex hyalino fuligineo-brunneis; cellula superiore subglobosa v. breviter ellipsoidea, inferiore subæquilonga, angustiore, ovoidea v. ovoideo-ellipsoidea; paraphysibus, tenuibus, septatis, simplicibus vel breviter ramulosis, conglutinatis.

Hab. in foliis vivis Euphorbiaceæ ejusdam (an *Pseudotrophis*?), Alto da Serra prope Sao Paulo, Brasilia.

18. *Asterina Coccolobæ* Ferd. et Winge, Botanisk Tidsskrift XXIX 5157

(1908) p. 10, tab. I, fig. 2. — Maculis nullis; peritheciis in greges orbiculares, 1-2 mm. diam., dispositis, epiphyllis, atris, applanato-scutatis, structura distincte radiata, margine crenulato-fimbriato, ambitu irregulariter ellipticis v. subrotundis, circ. 175-350 μ . d., hyphis brunneis, septatis, sæpe anastomosantibus, 4,5-6,5 cr., hyphopodia semiglobosa 9-12 \times 6-8 gerentibus, cinctis; ascis late ellipsoideis ovoideisve, nonnumquam subglobosis, sessilibus, 38-50 \times 25-37; sporidiis octonis, conglobatis, cylindraceo-oblongis, utrinque subtruncatis vel late rotundatis, crasse tunicatis, 1-septatis, ad septum constrictis, 20-25 \times 8-11, juvenilibus flavidulis, maturis brunneis.

Hab. ad folia viva *Coccolobæ* uviferæ in insula St. Croix India occ. (RAUNKIAER).

19. *Asterina consimilis* v. Höhn. Fragm. Mykol. VII (1909) in Sitzb. 5158

k. Ak. d. Wiss. Wien CXVIII, Abt. I, pag. 862. — Peritheciis nigro-opacis, scutellatis 200-250 μ . diam. in plagulis nigricantibus tenuibus usque ad 10 mm. latis insidentibus et regulariter sparsis; contextu perithecii opaco, ex hyphis 4-6 μ . latis radiatim dispositis constituto; ostiolo irregulariter radiatim laciniato; margine perithecii tenuiori irregulariter laciniato-lobulato; paraphysibus irregulariter ramosis supra brunneolis; ascis ovoideis, superne tunica fortiter incrassata, sessilibus, 4-8-sporis, 45-50 \times 24-25; sporidiis ovoideo-clavatis, bilocularibus, utrinque rotundatis, ad septum vix constrictis, 27-28 \times 13; loculo superiori paullo breviori et latiori,

contentu homogæneo; sporidiis diu hyalinis, maturis obscure brunneis; ascis Jodi ope flavidis.

Hab. in foliis arborum in Horto bot. Buitenzorg in ins. Java.

— *Ast. quartæ* Rac. affinis.

20. *Asterina valida* (Speg.) Sacc. et Trott., *Asterella valida* Spegazz., 5159 Fungi Paulist., Rev. Museo La Plata t. XV, p. 29. — Plagulis subiculi orbicularibus 3-8 mm. diam., arachnoideis matrici arctiuscule adnatis, atro-fumosis, ex hyphis 5-7 μ . cr., septulatis flexuosis, hyphopodiis destitutis, efformatis; peritheciis in centro plagularum plus minusve gregariis, dimidiatis 150-220 μ . diam., stellatim dehiscens, margine fimbriatulis membranaceis, contextu dense parenchymatico radiante subpellucido donatis; ascis antice obtusissimis crasseque tunicatis postice rotundato-cuneatis, brevissime minuteque pedicellatis e nodulo centrali subparenchymatico chlorino exsurgentibus, 70 \times 60, octosporis, tunica per ætatem fuscescente; sporidiis conglobatis medio validiusculis constrictis utrinque obtusiusculis 20-30 \times 12, uni-septatis loculis subisomorphis, primo hyalinis dein fuliginosis.

Hab. ad folia coriacea arbusculæ ignotæ cujusdam, Ipiranga até Moça, Brasilia (USTRER).

Subgen. *Clypeolella* v. Höhn. — Perithecia astoma.

21. *Asterina inversa* (v. Höhn.) Sacc. et Trott., *Clypeolella inversa* 5160 v. Höhn., Fragm. z. Mykol. X (1910) in Sitzb. k. Ak. d. Wiss. Wien, CXIX, Abt. I, p. 403. — Subiculo griseo-cinereo, rotundato, 5-10 mm. lato, sæpe plagulas tenues confluyendo latas efformante; hyphis violaceo-brunneis ramosis, arcte adnatis, 6-7 μ . latis, 16-32-articulatis, hyphopodiis unilocularibus, globosis, 9-10 μ . lat., præditis; peritheciis in subiculo sparsis, opacis, margine lobulatis, pariete tenui medio parenchymatico brunneo demum disrupto; ostiolo nullo; paraphysibus atypicis filiformibus, cellulari articulatis 5-6 μ . latis; ascis numerosis, crasse tunicatis, ex ovoideo-piriformibus subglobosis, octosporis, 50-65 \times 35-40, J. +; sporidiis hyalinis conglobatis, elongato-ovoideis, utrinque rotundatis, subteniter tunicatis, strato mucoso tenui cinctis, supra latioribus, bilocularibus, ad septum non constrictis plasmate subhomogæno-farctis, 22-24 \times 10; conidiis in mycelio sparsis, trilocularibus, superne rotundatis, basi acutatis, 28-36 \times 13-15; loculis binis superioribus brunneis, inferiore hyalino.

Hab. in pagina superiore foliorum coriaceorum leviorum serratorum viventium arboris cujusdam, Sao Leopoldo Rio Grande do Sul Brasilæ (THEISSEN). — Cum *Ast. silvatica* Speg., *Ast. Sapotacearum* Speg., *Ast. laxa* Wint. comparanda.

CHÆTASTERINA Bubák in Handel-Mazzetti Bot. Reis. Pontisch. Randgeb. in Ann. Naturhist. Hofmus. 1909, Wien XXIII, p. 102 (Etym. *chæte* seta et *Asterina*). — A typo gen. *Asterinae* recedit peritheciis ipsis copiose setigeris.

1. **Chætasterina anomala** (Cooke et Harkn.) Bub. l. c. *Asterina ano-* 5161
mala Cooke et Harkn. — Syll. I, pag. 49. — In foliis Pruni Laurocerasi in California et in mont. Ponticis.

MYXASTERINA v. Höhnelt, Fragm. Mykol. VII (1909) in Sitzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, p. 870 (Etym. *myxa* mucus et *Asterinae*). — Membrana peritheciali et subiculo ut in *Asterina*; nucleo mucoso. Asci aparaphysati, radiatim ex hyphenchymate basilari laxiusculo evoluti, breviter stipitati; sporidia brunnea, bilocularia.

1. **Myxasterina Strychni** v. Höhn., l. c. p. 868 et 871. — Peritheciis 5162
in subiculo tenui, folio arcte adnato insidentibus, scutellatis, margine lobulatis; ascis ex ovoideo-piriformibus breviter clavatis, superne crasse tunicatis, octosporis, 40-50 \times 18; sporidiis conglobatis, elongatis, demum brunneis, bilocularibus, 12-16 \times 5-6. — J. diu +.

Hab. in foliis *Strychni* sp., Depok in ins. Java.

Sect. 4. Hyalophragmiæ.

ASTERIDIUM Sacc. — Syll. I p. 49, IX p. 435, XI p. 269, XIV p. 699, XVI p. 650, XVII p. 785.

1. **Asteridium paulistanum** Spegazz., Fungi Paulist., Rev. Mus. La 5163
Plata t. XV, p. 29. — Peritheciis plerumque epiphyllis, matrici arctiuscule adnatis, dimidiato-scutatis, centro prosenchymaticis ambitu subanhystis pallidis, margine reticulatim fimbriolatis, 150-200 μ . diam.; ascis antice obtuse rotundatis crasseque tunicatis, postice cuneatis brevissime crasseque pedicellatis, 60-70 \times 25-30, octosporis, aparaphysatis; sporidiis conglobatis rectis vel lenissime curvulis utrinque acutiuscule rotundatis, 32-36 \times 6-7, primo 5-dein 7-postremo 9-septulatis, hyalinis, ad septum medium tantum constrictis.

Hab. ad folia coriacea Myrtacearum prope Ipiranga, Brasilia (USTERI).

2. *Asteridium membranaceum* (Spegazz.) Spegazz., Fungi Paulist., 5164 Rev. Mus. La Plata t. XV, pag. 30. — Ita vocanda *Micropeltis membranacea* Speg. — Syll. IX, p. 1069 — ex ipso auctore.

Fam. 11. Lophiostomataceæ (*).

Sect. 1. Hyalodidymæ.

LOPHIOSPHÆRIA Trev. — Syll. II p. 675, IX p. 1075, XI p. 383, XIV p. 702, XVII p. 886.

1. *Lophiosphæria tahitensis* Patouill., Bull. Soc. Myc. Fr. XXII (1906) 5165 p. 58. — Peritheciis atris, subhemisphæricis, basi insculptis, carbonaceis $\frac{1}{2}$ - $\frac{1}{2}$ mm. diam., fragilibus, ostiolis. viz prominulis, linearibus, labiis obtusis; nucleo albo; ascis cylindraceis, basi attenuatis, apice rotundatis, 100-150 \times 15-19, octosporis, paraphysibus linearibus, simplicibus v. ramosis, hyalinis; sporidiis distichis, hyalinis, longe fusoides, 1-septatis, medio leniter constrictis, sæpe 4-guttulatis, 33-36 \times 6.

Hab. in endocarpio *Cocos* nuciferæ Tahiti, Polynesia.

2. *Lophiosphæria Chusqueæ* Speg., Fungi Chilenses (1910) pag. 100, 5166 cum icon. — Peritheciis laxè gregariis, lenticularibus, epidermide clypeatim nigrefacta tectis, ostiolo minimo lineari donatis, 250-300 μ . diam.; ascis subclavatis breviter cuneato-pedicellatis, dense paraphysatis, 110-130 \times 18-20; sporidiis distichis e fusoides biconoideis 1-septato-constrictis, majusculis, hyalinis, 35-40 \times 8-9.

Hab. in culmis siccis putrescentibus *Chusqueæ* valdiviensis, Bahia de Corral Chile Amer. austr. — Inter *Clypeosphæria* et *Lophiotrema* videtur media; sporidia vetustiora forsàn triseptata.

3. *Lophiosphæria Sedi* (Hazsl.) Sacc. et Trav. — Syll. XIX, p. 1129, 5167 *Lophiostoma Sedi* Hazsl. Sphær. Hungar. p. 80, t. IV, f. 17. —

(*) *Lophiostomaceæ* Sacc. Mich. I, pag. 337 (1878), non Fuck. ! — *Sphæria* Sect. VIII *platystomæ* Pers. (1801) ex parte, *Platystomæ* Dumort. (1822).

A *Lophiotrema Sedi* (Fuck.) Sacc. Syll. II, p. 687, videtur diversa sporidiis bilocularibus, nec 3-septatis.

Hab. in caule *Sedi* sp. in Hungaria.

LAMBOTTIELLA Sacc. — Syll. II, p. 677 (ut subgen. *Lophiosphæricæ*), XIV, p. 26. — A typo dignoscitur sporidiis appendiculatis. Ad hoc genus referendæ sunt: *Lamb. anaxæa* Sacc. — *Lamb. glacialis* (Rehm) Sacc. — *Lamb. bonariensis* (Speg.) Sacc. — *Lamb. pulveracea* Sacc. — *Lamb. Fuckelii* Sacc. (Cfr. Syll. II, pag. 677-678). — *Lamb. heterostoma* (Ell. et Ev.) Sacc. (Cfr. Syll. IX, p. 1075).

1. *Lambottiella chilensis* Speg., Fungi Chilenses (1910) p. 99, cum 5168 icon. — Peritheciis foliiculis parenchymate immersis, 150-180 μ . diam., ostiolo cristato, carbonaceo, pro ratione majusculo, tantum exerto; ascis clavulatis, breviuscule paraphysatis, pedicellatis, 90-100 \times 10-12, octosporis; sporidiis distichis, ellipsoideo-biconoideis, inæquilateralibus, 4-guttulatis, hyalinis, utrinque minute appendiculatis, 15-17 \times 4-5.

Hab. in foliis dejectis putrescentibus *Perseæ* Lingue, Cerro Caracol de Concepcion Chile Amer. austr.

2. *Lambottiella corralensis* Speg., Fungi Chilenses (1910) p. 100. — 5169 — Peritheciis matrici infuscata plus minusve insculptis, ostiolo minuto cristato carbonaceo coronatis, laxe gregariis, atris, glabris, 120-130 μ . diam.; ascis subcylindraceis breviter cuneato-pedicellatis, parce paraphysatis, octosporis, 80-100 \times 7-10; sporidiis didymis, biconoideis, subnavicularibus, mediocribus, hyalinis, primo tunica mucosa tenui vestitis, dein nudis, utrinque apiculo conoideo minuto auctis, 16-25 \times 5-7.

Hab. in pedunculis emortuis *Francoæ* sonchifoliæ, Bahía de Corral Chile Amer. bor. — Sporidiis permaturis verisimiliter triseptatis et tunc gen. *Vivianellæ* adscribenda.

3. *Lambottiella mendax* (Rehm) Sacc. et Trott., *Lophiosphæra mendax* 5170 Rehm Ann. Mycol. V, (1907) pag. 544. — Peritheciis gregariis, innatis, demum superficialibus, globulosis, nigris, ca. 0,3-0,4 mm. diam., ostiolo in papillulam angustam brevem elongato, glabris; ascis clavatis, 50-70 \times 8-9, octosporis; sporidiis ellipsoideis, utrinque acutatis et filiformiter 2-3 μ . longe appendiculatis, bicellularibus, medio constrictis, utraque cellula 2-guttata, hyalinis, 12 \times 4, distichis; paraphysibus filiformibus, septatis, hyalinis, 1,5 μ . cr.

Hab. ad ramulum exsiccatum *Epilobii* ? *Fleischeri* supra Waidbruck Tirolæ austr. (Dr. REHM).

Sect. 2. Phæodidymæ.

SCHIZOSTOMA Ces. et De Not. — Syll. II p. 673, IX p. 1074, XI p. 382, XIV p. 702, XVI p. 650, XVII p. 887.

1. **Schizostoma incongruum** Rehm in Rehm et Rick in Broteria V 5171 (1906) p. 225. — Peritheciis in crusta nigra stromatica late effusa arete congregatis, innatis, hemisphærico-prominentibus, globosis, apice rima tenuissima longitudinali, haud cristata apertis, atris, 0,3–0,5 mm. diam.; ascis cylindraceis, longissimis, 12–14 μ . latis, octosporis; sporidiis fusiformibus, utrinque acutatis, medio septatis, utraque cellula crasse 1-guttatis, primitus hyalinis, dein fuscidulis, ad septum non constrictis, 30–35 \times 9–10, monostichis paraphysibus filiformibus, 2 μ . crassis.

Hab. in culmis Bambusæ Taquaræ in Brasilia. — *Schizostomati hysteroioidi* affine.

Sect. 3. Hyalophragmiæ.

LOPHIOTREMA Sacc. — Syll. II p. 678, IX p. 1076, XIV p. 703, XVI p. 651, XVII p. 887.

1. **Lophiotrema argentinense** Spegazz., An. Mus. Nac. Buenos Aires 5172 t. XIX (1909) p. 430. — Peritheciis sparsis v. laxè gregariis, sub-superficialibus, subglobosis, 200–300 μ . diam., acute ostiolatis, glabris; ascis clavatis basi attenuatis et in pedicellum brevem crassiusculum productis, 120–130 \times 20, octosporis, paraphysatis; sporidiis oblique v. recte mono-distichis, cylindraceo-fusoideis, 7-septatis, 40–45 \times 10, loculis minute 1-guttulatis, hyalinis.

Hab. in ligno denudato carioso induratoque Prosopidis cujusdam, Alto Grande prov. San Luis, Argentina Americæ austr.

2. **Lophiotrema Halesiæ** Fairman Annal. Mycologici, v. VIII (1910) 5173 p. 329. — Peritheciis gregariis, minutis, atris, immersis dein erumpentibus, ostiolo emergente compresso sed angusto; ascis clavato-cylindraceis, rectis v. curvulis, apice rotundatis, paraphysibus filiformibus obvallatis, 80–100 \times 10; sporidiis distichis, angustis, oblongo-fusoideis, sæpe lunatis v. sigmoideis, utrinque acuminatis, 5-septatis, vix constrictis, hyalinis, 27–33 \times 3,33 \times 4,50.

Hab. in cortice Halesiæ tetrapteræ cultæ, Lyndonville N. Y. Amer. bor.

3. *Lophiotrema coffeicola* Speg., An. Mus. Nac. Buenos Aires t. XIX 5174 (1909) p. 430. — Maculis nullis; peritheciis sparsis semiimmersis, minute et lineariter ostiolatis, carbonaceis, subglobosis, 120-150 μ . diam.; ascis fusoideis vix pedicellatis, 75-80 \times 10, paraphysatis, octosporis; sporidiis fusoideis 5-septatis, ad septum medium tantum constrictis, utrinque subacutiusculis, 22-24 \times 6, loculo tertio supero vix crassiore, loculis omnibus grosse 1-guttulatis.

Hab. ad corticem vetustiore *Coffeæ arabicæ* prope Orán Jujuy Argentina, America austr.

4. *Lophiotrema vagabundum* Sacc. — Syll. II, p. 684 et IX p. 1081 5175 — var. *Hydrolapathi* Sacc., Ann. Myc. III (1905) p. 232, Syd. Myc. Germ. n. 322. — A typo sat ludibundo præcipue dignoscitur peritheciis paullo majoribus, nempe 0,3-0,5 mm. diam. et magis prominulis, ostiolo minus compresso.

Hab. in caulibus emortuis *Rumicis Hydrolapathi*, Wannsee prope Berolinum Germaniæ (SYDOW).

5. *Lophiotrema ? paspalicola* Spegazz., Anal. Mus. Nac. Buenos Aires 5176 t. XIX (1909) p. 430. — Peritheciis laxè gregariis innato-erumpentibus, 150-180 μ . diam., ostiolo lineari vix papillato præditis; ascis cylindraceo-subclavulatis, basi longe sensimque attenuatis, in pedicello modice elongato productis, 90-100 \times 10-11, 4-8-sporis, paraphysatis; sporidiis fusoideis, sæpius distichis, utrinque acutatis, 3-septatis, ad septa, ad medium validius, constrictulis, loculo secundo supero tumidiore, 22 \times 5,5-6, primo hyalinis serius leniter chlorinis.

Hab. ad culmos dejectos putrescentes *Paspali* cujusdam pr. Tucumán Rep. Argentina America austr. — Species ostiolo obscure lophiostomoideo ad *Leptosphaeriam* vergens; *Lophiostomati culmifrago* Speg. peraffine.

6. *Lophiotrema Arundinariæ* Rehm, Ann. Mycol. V (1907) p. 532. — 5177 Péritheciis gregariis primitus epidermide denigrata tectis, dein liberis, globulosis, glabris, atris, nitentibus, ostiolo compresso cristato brevissimo, poro perspicuo pertusis, 0,5 mm. diam., subcarbonaceis; ascis clavatis, apice rotundatis, 80-85 \times 10-12, octosporis; sporidiis fusiformibus, rectis, hyalinis, strato mucoso tenui obductis, 3-septatis, haud constrictis, 18-20 \times 3,5-4, distichis; paraphysibus filiformibus.

Hab. in *Arundinariæ* culmo, Sao Leopoldo, Rio Grande do Sul, Brasilæ (RIEK). — *Lophiotr. culmifrago* proximum.

VIVIANELLA Sacc. — Syll. II, p. 687 ut subg. *Lophiotrematis*; XIV, pag. 27 (Etym. a DOMINICO VIVIANI, Bot. prof. genuensi et claro mycologo). — A typo dignoscitur sporidiis utrinque appendiculatis. Ad hoc genus sunt referendæ: *Viv. Sedi* (Fuck.) Sacc. — *Viv. affinis* (Speg.) Sacc. — *Viv. cristata* (H. Fabr.) Sacc. — *Viv. angustilabra* (B. et Br.) Sacc. — *Viv. Winteri* Sacc. — *Viv. aucta* Sacc. (Cfr. Syll. II, pag. 687-688) — *Viv. magellanica* (Speg.) Sacc. — *Viv. australis* (Speg.) Sacc. — *Viv. leucospora* (Nitschkæ) Sacc. (Cfr. Syll. IX, p. 1079).

1. *Vivianella chilensis* Speg., Fungi Chilenses (1910) pag. 101, cum icon. — Peritheciis laxè gregariis ligno denudato plus minusve infossis, coriaceo-subcarbonaceis, ostiolo lineari angustissimo præditis, subglobosis, 200-250 μ . diam.; ascis cylindraceis, breviter pedicellatis, dense paraphysatis, 120 \times 15-18; sporidiis subfusoides, 5-septato-constrictulis, subtorulosis, loculo mediano supero non v. leniter crassiore, utrinque appendice mucosa anguiformi acuta auctis, submajusculis, hyalinis, 30-35 \times 10-12.

Hab. in ramis siccis *Eugeniæ obtusæ*?, in silvis Cerro Caracol de Concepcion Chile Amer. austr.

Sect. 4. Phæophragmiæ.

LOPHIOSTOMA Ces. et De Not. — Syll. II p. 689, IX p. 1083, XI p. 383, XIV p. 702, XVII p. 886.

1. *Lophiostoma xerophilum* Spegazz., An. Mus. Nac. Buenos Aires t. XIX (1909) pag. 432, cum icon. — Peritheciis laxè gregariis, parvis, semioxertis, subglobosis 250-400 μ ., eximie lineari ostiolatis non nitentibus, ostiolo apice compresso-truncato; ascis cylindraceis, brevissime pedicellatis, 150 \times 18-20, octosporis, paraphysatis; sporidiis ellipsoideis, fumosis, oblique monostichis, septis 5 crassis nigris variegatis, 25-30 \times 12-14, loculis sæpius dense guttulatis.

Hab. ad partem internam corticis durioris *Larrea divaricatæ*, Cacheuta prope Mendoza, Argentina America austr.

2. *Lophiostoma andicola* Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) pag. 431. — Peritheciis densissime gregariis, plus minusve matrice immersis, carbonaceis, e globoso compressis, 150-250 μ . diam.; ascis clavatis deorsum longe sensimque angustatis, p. spor. 110-120 \times 14-16, pedicello 25-30 \times 5, octosporis, dense paraphysatis; sporidiis distichis subfusoides 5-septatis utrinque acutiusculis, 28-30 \times 7-9, pallide olivaceis, loculis minute 1-guttulatis.

Hab. ad truncos ramosque denudatos Patagonii pinifolii, Puente del Inca, prope Mendoza, Argentina Amer. austr. — *L. macrostomo* De Not. affinis species sed certe distincta.

3. *Lophiostoma triseptatum* Peck — Syll. II, p. 691. — var. *diag- 5181*
gonale Fairm., The Pyren. of Orleans County, (Proc. Rochest. Acad. (1905) p. 186). — Sporidiis $17 \approx 6,7$, oblique triseptatis. In truncis Salicis, Orleans County Amer. bor. — Var. *acutum* Fairm. l. c. — Sporidiis monostichis, triseptatis, $20 \approx 6-7$ utrinque acutis. In ramis decorticatis Aceris, Orleans County Amer. bor. — Var. *pluriseptatum* Fairm. l. c. p. 185. — Ascis p. sp. $70-75 \approx 10-12$; sporidiis distichis v. oblique monostichis, oblongis v. clavato-oblongis, obtusis, initio 3-septatis, demum 4-5-septatis, ad septa constrictis, brunneis, $15-20 \approx 5-6$. In truncis Aceris, Lyndonville Amer. bor.

4. *Lophiostoma præandinum* Spegazz., An. Mus. Nac. Buenos Aires 5182
 t. XIX (1909) p. 433. — Peritheciis laxè gregariis, matrice nigrefacta infossis, subglobosis, $200-300 \mu$. diam., carbonaceis; ascis e fusoides clavulatis deorsum breviuscule pedicellatis, $130-150 \approx 18-22$, octosporis, paraphysatis; sporidiis subfusoides, utrinque obtusiusculis, oblique distichis, $35-40 \approx 9-11$, 5-6-septatis, ad septa, ad medium vix validius, constrictulis, fuligineis, loculis 2 intimis leniter obscurioribus et sæpius grosse guttulatis.

Hab. ad ramos decorticatos et emortuos Larreæ nitidæ, Cacheuta, prope Mendoza, Rep. Argentina America austr.

5. *Lophiostoma imperfectum* Ellis et Fairm. in Fairm. The Pyren. 5183
 of Orleans County, in Proc. Rochest. Acad. (1905) pag. 187. — Peritheciis superficialibus, sparsis in areis denigratis, hemisphaericis, dein collabescentibus, vix $0,5$ mm. diam., ostiolo leviter compresso, minuto; ascis clavato-cylindræis, stipitatis, paraphysatis, $40-50 \approx 6-8$; sporidiis monostichis, v. sursum distichis, oblongo-ellipsoideis, utrinque acutulis, 3-septatis, leviter constrictis, rectis v. curvulis, $12-18 \approx 6-7$, brunneis.

Hab. in caule emortuo Asclepiadis sp.?, Lyndonville N. Y. Amer. bor. — Sporidia in multis ascis imperfecte evoluta.

6. *Lophiostoma macrostomum* (Tode) Ces. et De Not. — Syll. II, 5184
 pag. 700 — var. *septem-septatum* Sacc. ap. Berl. Ic. fungor. I, p. 14, t. 8, f. 8. — Dignoscitur sporidiis 7-septatis, $40-45 \approx 9-11$; peritheciis sparsis $0,5$ mm. diam.

Hab. in cortice Salicis sp. in collibus Euganeis Ital. bor. — Extat quoque var. americana sporidiis 9-septatis (ELLIS).

7. *Lophiostoma humile* Speg., An. Mus. Nac. Buenos Aires t. XIX 5185 (1909) p. 431, cum icon. — Peritheciis laxè gregariis matrice immersis, carbonaceis, subglobosis, 120-150 μ . diam., ostiolo lineari tenuissimo acuto ægre perspicuo tantum exerto; ascis cylindraceis breviuscule pedicellatis, 70-90 \times 9-12, tetrasporis, paraphysatis; sporidiis oblique monostichis, cylindraceis v. obsoletissime subbiconoides, utrinque obtusis, 20-22 \times 7-9, 3-septatis, loculis 2 intimis obscurioribus, omnibus grosse 1-guttulatis.

Hab. ad ramos emortuos dejectos Casuarinæ equisetifoliæ, Claypole, prope Buenos Aires Argentina America austr. — *L. quadrinucleato* Karst. cognatum; tunica ascorum jodi ope lenissime cærulescit.

8. *Lophiostoma Ephedræ* Hollós, Ann. Mus. Nat. Hung. IV (1906) 5186 p. 330, tab. VIII, fig. 3 — Peritheciis epidermide tectis, globosis, nigris, 400-600 μ . diam., ostiolo 210-230 \times 140-180 epidermidem perforante, dein superficialibus; ascis cylindraceis, longe stipitatis, 90-100 \times 16-20 (parte sporifera); paraphysibus filiformibus, septatis, ramosis; sporidiis monostichis aut sursum inordinate distichis, oblongo-ellipsoideis, cylindraceis, initio hyalinis, 1-septatis, dein ochraceis 3-septatis, demum atro-brunneis, asperulis, aculeolatis, ad septa constrictis, 18-26 \times 8-10, plerumque 24 \times 9, loculis sæpe inæqualibus.

Hab. in ramulis siccis *Ephedræ distachyæ* prope Kecske-mét Hungariæ. — Socia adest *Wojnowicia Ephedræ* quæ probabiliter ejus status pycnidicus.

Sect. 5. Hyalodictyæ.

LOPHIDIOPSIS Berl. — Syll. IX, p. 1093.

1. *Lophidiopsis chilensis* Speg., Fungi Chilenses (1910) p. 102, cum 5187 icon. — Peritheciis laxè gregariis ligno denudato omnino immersis globosis parvulis, ostiolo minuto angusto vix exerto, 120-150 μ . diam.; ascis e clavato subsaccatis breviuscule attenuato-pedicellatis, paraphysatis, 100-110 \times 16-18; sporidiis distichis ellipsoideis utrinque rotundatis hyalinis mediocribus, transverse 3-septato-constrictulis, loculis 1 v. 2 centralibus septo altero verticali divis, 18-22 \times 9-10.

Hab. in ramis siccis putrescentibus *Trevoræ trinervis* in collibus S. Bernardo prope Santjago Chile Amer. austr. — Forsan *Sphæria angustata* Pers. huc pertinet.

Sect. 6. Phæodictyæ.

PLATYSTOMUM Trev. — Syll. II p. 716, IX p. 1091, XIV p. 706, XVI p. 653 (sub *Lophidium*), XVII p. 889 (sub *Platystomum*).

1. *Platystomum argentinense* Spegazz., An. Mus. Nac. Buenos Aires 5188 t. XIX (1909) p. 434, cum icon. — Peritheciis tota matrice immersis subglobosis 250-300 μ . diam., carbonaceis, ostiolo angustissimo vix indicatis; ascis subcylindraceis abrupte graciliterque pedicellatis, parte sp. 110-120 \times 25-30, pedicello 30 \approx 5, octosporis, aparaphysatis v. paraphysibus parcissimis commixtis; sporidiis oblique mono- v. distichis, ellipsoideo-elongatis, 11-14-septato-muriformibus, olivaceis, 35 \approx 12.

Hab. ad lignum induratum trunci cariosi *Duvauæ longifoliæ*, Santa Catalina, prope Buenos Aires Rep. Argentina Amer. austr. — *P. thyridoidi* (Sacc.) affine, ascis caudiculato-stipitatis sporidiisque paullo minoribus tamen recedens.

2. *Platystomum muriforme* (Hanzl.) Sacc. et Trav. — Syll. XX p. 428 5189 — *Lophiostoma muriforme* Hanzl. Sphær. Hung. pag. 84, t. V, fig. 18. — Peritheciis . . . ; ascis cylindraceis apice rotundatis deorsum tenuato-stipitatis, filiformi-paraphysatis; sporidiis oblique monostichis, ellipsoideis, coloratis, utrinque rotundatis, 7-septatis, non constrictis, septis (ut videtur) ternis crassioribus, loculis 3-4 longitrorsum partitis.

Hab. in . . . in Hungaria.

Sect. 7. Scolecosporæ.

LOPHIONEMA Sacc. — Syll. II p. 717, IX p. 1094.

1. *Lophionema Bambusæ* von Hühnel, Stzb. k. Ak. d. Wiss. Wien 5190 CXVIII, Abt. I (1909) p. 323, cum icon. — Peritheciis gregariis, quandoque binis approximatis, nigris, subopacis, profunde immersis, hemisphærico- v. semiovoideo-prominentibus, parietibus parenchymaticis firmis 60-90 μ . cr. pluristratis præditis, 0,5-1 mm. latis, 500-700 μ . altis, collo nullo; ostiolo compresso et rimoso donatis; ascis cylindraceis usque ad 300 μ . long., supra rotundatis ad 10 μ . latis, basi 8 μ ., tunica apice usque ad 4 μ . cr., J -, non pedicellatis, octosporis; paraphysibus numerosissimis, 1 μ . cr., su-

pra ramoso-reticulatis, ascos superantibus; sporidiis fasciculatis, hyalinis, filiformibus, utrinque obtusis, multiseptatis, $300 \approx 1,8$, articulis 6-10 μ . longis.

Hab. in vaginis siccis putrescentibus *Bambusæ* sp. in Horto Bot. Buitenzorg in ins. Java.

Fam. 12. Hemhysteriaceæ.

PARMULARIA Lév. — Syll. II p. 661, XI p. 387, XIV p. 708, XVI p. 657.

1. *Parmularia dimorphospora* R. Maire, Ann. Mycol. VI (1908) p. 149, 5191 fig. 5, tab. I, fig. 4. — Stromatibus plus minusve regulariter sub-orbicularibus, crustaceis, nigris, 0,5-2 mm. diam., maculæ brunneolæ sæpe obsoletæ insidentibus, contextu microthyriaceo; peritheciis linearibus, pariete proprio destitutis, e centro stromatis plus minusve regulariter irradiantibus, rima angustissima dehiscentibus; ascis octosporis, junioribus ovoideo piriformibus, maturis oblongo-cylindraceis, sessilibus, 22-25 \approx 8-9, crasse tunicatis, apice univoelatis, gelificatione dehiscentibus; sporidiis oblongo-cylindraceis, 11-14 \approx 4, distichis, maturis episporio dilutissime brunneolo et minutissime verruculoso præditis, guttulis oleosis lutescentibus fartis, ad medium septatis, vix constrictis, cellula superiore paulo latiore, inferiore paulo angustiore et sæpius evidenter longiore; paraphysibus filiformibus, simplicibus vel parce ramosis, apice incrassatulis, contentu oleoso lutescente fartis; sporis secundariis filiformibus, curvatis, utrinque acutis, levibus, continuis, guttulis oleosis lutescentibus fartis, 15-25 \approx 1,5-2, in sporophoris subhyalinis, cylindraceis, fasciculatis, circ. 10-15 \approx 1-1,5, ascis immixtis, solitarie acrogenis.

Hab. in foliis vivis Myrtaceæ cujusdam, Mondagui pr. Sao Paulo, Brasilia. — Sporidiis tenuiter verruculosis, sporulisque septorioideis inter ascos mixtis prædistincta species et a typo desciscens.

2. *Parmularia Hymenolepidis* P. Henn., Hedw. XLVII (1908) p. 261. 5192 — Stromatibus hypophyllis, sparsis, crustaceo-membranaceis, atris, dimidiato-scutellatis, 5-6 mm. diam., loculis radiato-plicatis, ramosis, longitudinaliter rimoso-dehiscentibus; ascis clavatis, obtusis, 8-sporis, 28-35 \approx 6-7, paraphysibus copiosis, ascos superantibus,

apice conglutinatis, clavatis, flavo-brunneis; sporidiis subdistichis, oblonge ovoideis, 2-guttulatis, medio 1-septatis, flavo-fuscidulis, $10 \approx 3-3,5$.

Hab. in foliis Hymenolepidis spicatæ, Mindanao, Mt. Apo, 2000 m. alt., in ins. Philippin. (COPELAND). — *Parm. discoideæ* affinis, sed distincta.

3. *Parmularia reticulata* Starb., Ascom. Schwed. Chaco-Cordill. Ex- 5198
ped., Arkiv. f. Bot. Bd V (1905) pag. 6, fig. 5. — Stromatibus epiphyllis, gregariis, interdum nonnullis confluentibus, facile secedentibus, fere membranaceis, ob perithecia elongata e centro communi radiantia, apicibus exterioribus plus minusve distantibus stellulatis, circ. 1 mm. diam.; peritheciis apicibus centralibus mutua pressione compressis angustioribus, apicibus excentricis latioribus, obtusis, $\frac{1}{4}$ - $\frac{1}{2}$ mm. longis, circa 0,1 mm. latis, denique longitudinaliter rimose dehiscentibus, totis reticulo chordis mycelialibus anastomosantibus in hyphas 3,8-6,5 μ . crassas, circa stromata retiformes transeuntibus, maculas longitudinales formantibus composito circumtextis; ascis ovoideis, sursum magnopere incrassatis, 48-52 \approx 19; sporidiis octonis, conglobatis, medio uniseptatis, constrictulis, cellula superiore interdum sphaeroidea vel duabus conicis, primo hyalinis, denique fuligineis, membrana crassiuscula, 16,5-21,5 \approx 7,5-10; paraphysibus filiformibus, flexuosis, septatis, ad septa superiora constrictis, circ. 5 μ . cr.

Hab. in folio humi jacente in rara silva Colonia Risso, Paraguay (MALME). — Peritheciis magis divergentibus, reticulo vestitis distincta species. Etiam *Parm. Styracis* Lév. habet mycelium, cujus chordæ stromata circumdantes in perithecia ascendunt, sed vix sunt anastomosantes et reticulum manifestum non formant (Starb. l. c.).

4. *Parmularia Stigmatopteridis* Ferd. et Winge, Botanisk Tidsskr., 5194
XXIX (1908) pag. 317, fig. 7. — Stromatibus primo simplicibus, punctiformibus, ambitu circulari, habitu fere *Asterinæ*, mox autem compositis, margine lobato, denique crustuliformi-confluentibus, plagulas nigras, irregulares, nunc minutissimas, nunc ad 2 mm. elongatas, paginam inferiorem conspurcantes formantibus; peritheciis rimoso-hiantibus, flexuosis, inter se mæandriiformi-sinuatis, lente etiam ægre conspicuis, raro subtectis, e centro sterili radiantibus; ascis sessilibus, juvenilibus saccatis, apice valde incrassatis, maturis plerumque cylindraceo-clavatis, rarius clavatis v. irregularibus, 30-40 \approx 10-13; sporidiis octonis, conglobatis, oblongo-cla-

vatis v. clavatis, uno- rarius biseptatis, medio constrictis, 12-15 \times 5-6, griseo-brunneolis.

Hab. ad paginam inferiorem Filicum præcipue Stigmatopteridis nec non Dryopteridis patentis in America trop. et subtropicali.

HYSTEROSTOMELLA Speg. — Syll. IX p. 1098, XI p. 385, XIV p. 708, XVI p. 655, XVII p. 892.

1. **Hysterostomella concentrica** Syd., Ann. Mycol. VII (1909) p. 544. 5195

— Stromatibus epiphyllis, sine maculis, sparsis, orbicularibus, 2-4 mm. diam., planis, crustaceis, atris, totis ex peritheciis concentrice ordinatis compositis; peritheciis in annulos 4-5 concentrice dispositis, dense aggregatis et sæpe confluentibus, subrotundatis subinde ellipticis, e mutua pressione sæpe angulatis, rima latiuscula apertis; ascis cylindraceo-clavatis, apice rotundatis ibique crasse tunicatis, subsessilibus, 45-55 \times 14-18, octosporis; sporidiis distichis, oblongis, utrinque rotundatis, 1-septatis, loculo superiore paullo majore, diu hyalinis, tandem fuscis, 14-18 \times 4-5; paraphysibus filiformibus, ascos superantibus, conglutinatis et epithecium flavo-brunneolum formantibus.

Hab. in foliis vivis Trichiliæ emeticæ, Africa or. lusitanicæ (C. W. HOWARD). — Habitus *Hyster. andinæ* Pat.

2. **Hysterostomella elæicola** Maubl., Bull. Soc. Mycol. France XXIII 5196

(1907) pag. 143, tab. XX, fig. 11-15. — Stromatibus sparsis, epiphyllis, in maculis pallidis, immarginatis insidentibus, irregularibus, lobatis, nigris, carbonaceis, usque ad 1 cm. diam.; peritheciis in quoque stromate numerosis, elevatis, flexuosis intricatisque, rima longitudinali angusta demum apertis; ascis ovoideis, apice rotundatis et hinc tunica crassiore præditis, octosporis, 50-55 \times 15-20; sporidiis in asco inordinatis, primum hyalinis, medio 1-septatis duabus magnis guttulis præditis, demum ellipsoideis, obtusis, medio 1-septatis et lenissime constrictis, eguttulatis, pallide fuscis, 16-17 \times 6.

Hab. in foliis Elæis guineensis Dahomey Guinea Africae.

*Fam. 13. Hysteriaceæ.**Subfam. 1. Hysteriææ.**Sect. 1. Hyalosporæ.*

SCHIZOTHYRIUM Desm. — Syll. II p. 723, IX p. 1100, XIV p. 710, XVI p. 657, XVII p. 892.

1. **Schizothyrium macrosporum** D' Almeida et Da Camara, Bol. Soc. 5197
Brot. XXIV (1908-1909) Extr. p. 23. — Peritheciis amphigenis, innato-superficialibus, sparsis, primo orbiculatis demumque ellipsoideis, diu convexiusculis dein applanatis, rima longitudinali percursis; ascis dense congestis, claviformibus, longe pedicellatis, 100-150 \times 15-17; sporidiis distichis, oblongo-fusoideis vel subellipsoideis, utrinque rotundatis, continuis, hyalinis, 17-20 \times 5; paraphysibus copiosissimis, filiformibus, ascos superantibus.

Hab. in foliis petiolisque Hederæ Helicis, in Horto botan. Coimbra Lusitaniæ (A. MOLLER).

2. **Schizothyrium acuum** Bubák, Fünft. Beitr. Pilzfl. Tir., in Ber. na- 5198
turw.-med. Ver. Innsbruck, XXX Jahrg. (1905-1906) Extr. p. 6.
— Mycelio subcuticulari, ex hyphis ramosis, crebre septatis, brunneis et plagulas brunneas efficiente constituto; peritheciis gregariis, subcuticularibus, dimidiatis, convexis, nigris v. nigro-brunneis, nitidis, primum rimulosis demum fere omnino apertis, flavido-albis, 100-200 \times 50-70; ascis ovoideis 30-38 \times 22-29, hyalinis, utrinque rotundatis, apice constrictulis, hyalinis, octosporis; sporidiis confertis, elongatis, 13-18 \times 6,5-8, utrinque rotundatis, medio septatis, hyalinis, contentu fortiter refringenti.

Hab. in foliis emortuis Pini sp., prope Meran Tirolia (CERNY).

3. **Schizothyrium Jaapii** (Rehm) Sacc. et Trott., *Aporia Jaapii* Rehm 5199
ap. Jaap in Abhandl. Bot. Ver. Brandenb. XLVII (1905) p. 84.
— Peritheciis gregariis, plerumque longitudinaliter dispositis, elongatis, rectis, utrinque obtusis, nigris, rima elongata percursis, udis discum dilute flavidum linearem tenui-marginatum ostendentibus, 200-300 \times 100; ascis clavatis apice rotundatis, octosporis, 25-30 \times 10-12; sporidiis fusoideis, rectis v. curvulis, unilocularibus, hyalinis, 15-18 \times 3-4, tristichis; paraphysibus ramosis, conglutinatis, hyalinis.

Hab. in rhachidibus siccis *Aspidii spinulosi*, Sattenfeld prope Oldesloe Schleswig-Holstein, Germania.

4. *Schizothyrium hysterioides* (Hazsl.) Sacc. et Trav. — Syll. XXI 5201
p. 753 — *Aporia hysterioides* Hazsl. Maygar. Discom. p. 194, t. III, f. 7. — Peritheciis ellipsoideis, rima latiuscula hiantibus, nigris; ascis clavatis breviter crasseque tenuato-stipitatis, apice subrotundatis, octosporis; paraphysibus filiformi-clavatis, sursum coloratis; sporidiis distichis, ellipsoideis, utrinque rotundatis, subinde inæquilateris, guttulatis, hyalinis, $10-16 \times 5-6$.

Hab. in foliis languidis . . . in Hungaria.

Sect. 2. Hyalodidymæ.

AULOGRAPHUM Lib. — Syll. II p. 727, IX p. 1101, XI p. 386, XIV p. 711, XVI p. 659, XVII p. 895.

1. *Aulographum valdivianum* Speg., Fungi Chilenses (1910) p. 110. — 5201
Minutissimum, sparsum v. laxe gregarium, lineare v. vix furcatum, utrinque obtusiusculum, glabrum, membranaceum, nigrum, $250-500 \times 40-50$; ascis obovatis, brevissime pedicellatis, obsolete pseudoparaphysatis, $20-25 \times 10-12$, octosporis; sporidiis ellipsoideis v. biconoideis, non v. lenissime subclavulalis, 1-septato-constrictulis, hyalinis, parvis, $8-10 \times 2,5$.

Hab. in ramis siccis *Rubi sancti* prope Ciudad de Valdivia Chile Amer. austr. — Observante cl. Spegazzini l. c. genus *Aulographum* ad *Hemhysteriaceas* propius accedit.

2. *Aulographum Chusqueæ* Speg., Fungi Chilenses (1910) pag. 109, 5202
cum icon. — Minutum, hinc inde pauci-gregarium (3-10) lineare v. furcatum, utrinque obtusum, glabrum, membranaceum, nigrum, $600-1000 \times 30-80$; ascis ovoideis, brevissime crasseque pedicellatis, aparaphysatis, $25-28 \times 14-18$, octosporis; sporidiis conglobatis, elliptico-didymis, hyalinis, parvis, $10-12 \times 3-4$.

Hab. in culmis siccis et plus minusve putrescentibus *Chusqueæ valdiviensis* prope Bahia de Corral Chile Am. austr.

3. *Aulographum donacicola* Spegazz., An. Mus. Nac. Buenos Aires 5203
t. XIX (1909) p. 441. — Peritheciis superficialibus plus minusve gregariis, atris, subellipsoideis, $150-200 \times 75-100$, rima angustissima dehiscentibus, margine vix denticulato-repandulis; ascis subcylindraceis, supra subtruncato-rotundatis crassissimeque tunicatis, basi abrupte cuneatis, pedicello brevissimo nodulosoque suffultis, $30-$

35 \times 12, octosporis, aparaphysatis; sporidiis distichis v. subconglobatis, 10 \times 12 \approx 5-6, medio 1-septatis, non vel leniter constrictulis, hyalinis, loculis grosse 1-guttulatis.

Hab. ad culmos dejectos putrescentes Arundinis Donacis in sepibus Lezama, prope Buenos Aires America austr.

GLONIUM Mühl. — Syll. II p. 731, IX p. 1102, XI p. 386, XIV p. 711, XVI p. 661, XVII p. 896.

1. *Glonium uspallatense* Speg., An. Mus. Nac. Buenos Aires t. XIX 5204 (1909) p. 436, cum icon. — Peritheciis sparsis v. laxe gregariis, erumpentibus, lineari-ellipticis vix convexulis, 250-500 \times 100-150; ascis clavatis apice crasse tunicatis, basi sensim attenuatis, pedicello brevissimo suffultis, octosporis, paraphysatis, 100 \times 20; sporidiis obovato-didymis, conglobatis, 20-22 \times 10-11, medio 1-septatis, loculis inæqualibus.

Hab. ad ramos vetustiores emortuos decorticatos Bulnesiæ Retamo in præandinis Uspallata prope Mendoza, Argentina America austr.

2. *Glonium araucanum* Speg., Fungi Chilenses (1910) pag. 110. — 5205 — Peritheciis sparsis, longitudinalibus, subsuperficialibus, lineari-bus, utrinque obtusiusculis, parvis, 0,5-1,5 mm. long., 0,25-0,35 mm. lat., rima angusta impressa percursis, atris, carbonaceis; ascis cylindræis, breviuscule pedicellatis, non v. parcissime paraphysatis, 100-110 \times 18-20; sporidiis mono- v. distichis, mediocribus, elliptico-biconoideis, hyalinis, ad medium 1-septato-constrictulis, primo tunica mucosa tenui vestitis, dein nudis, 20-24 \times 8-10.

Hab. in sarmentis siccis et subputridis Lardizabalæ in silvis prope Cerro Caracol de Concepcion Chile Amer. austr.

3. *Glonium chilense* Speg., Fungi Chilenses (1910) p. 111. — Spar- 5206 sum, parvum, e ligno denudato erumpens, plus minusve infossum, e cinereo atrum, carbonaceum, glabrum, lineare, utrinque acutum, rima ægre perspicua dehiscens, 1-1,5 mm. long., 0,300-0,350 mm. lat.; ascis subcylindræis breviter pedicellatis, paraphysatis, 60-70 \times 10-12, octosporis; sporidiis mono- v. distichis, clavulato-didymis, hyalinis, subparvis, 15-16 \times 7-8.

Hab. in ramis siccis *Cryptocaryæ*? in silvis Cerro Caracol de Concepcion Chile Amer. austr. — *Gl. lineari* affine.

4. *Glonium valdivianum* Speg., Fungi Chilenses (1910) pag. 114. — 5207 Péritheciis gregariis, erumpenti-superficialibus, minutis, atris, utrinque obtusiusculis, leniter rimosis, atris, 0,3-1 mm. long., 0,15-

0,25 mm. lat. et alt.; ascis cylindraceis breviter pedicellatis, paraphysatis, 45-50 \times 6-7; sporidiis clavulatis, didymis, hyalinis, parvis, 8 \times 3.

Hab. in ligno vetusto denudato Perseæ Lingue prope Ciudad de Valdivia, Chile Amer. austr. — *Glom. microsporo* Sacc. affine a quo differt ascis et sporidiis minoribus.

5. *Glonium microsporum* Sacc. — Syll. II, p. 736 — var. *palmincola* 5208

Theiss., Beih. Bot. Centralbl. Bd. XXVII (1910) Abt. II, p. 407. Ascomatibus ellipticis v. interdum fere globosis, rima tenuissima dehiscentibus, carbonaceo-duris; ascis cylindraceis gracilibus, pedicellatis, p. sp. 52-60 \times 5,5, pedicello c. 12-15 \times 2,5; paraphysibus dense constipatis ascos superantibus, tenuibus; sporidiis hyalinis, rectis v. oblique monostichis, ad septum non v. vix constrictis, utrinque acutatis v. etiam rotundatis, cellula inferiore sæpe paullo angustiore, quaque cellula 1-guttata, 9-10,5 \times 3-3,5.

Hab. in ligno Palmarum, Rio Grande do Sul Brasilæ. — Var. *minus* Speg., Annal. Mus. Nac. Buenos Aires t. XVII (1908) p. 130. — Peritheciis 0,25-0,50 \times 0,20-0,25; ascis 40-50 \times 4; sporidiis 7-8 \times 3-4. — Vulgatum in disco sectionum ramorum truncorumque in Matto Queimado et San Pedro Rep. Argentina in America australi.

6. *Glonium Chusqueæ* Speg., Fungi Chilenses (1910) pag. 112, cum 5209

icon. — Peritheciis laxè gregariis, erumpentibus, linearibus, angustis, utrinque subacutiusculis, carbonaceis, rima ægre perspicua dehiscentibus, 0,5-1 mm. long., 90-100 μ . lat. et alt.; ascis ex obovato ellipsoideis, abrupte graciliterque pedicellatis, aparaphysatis, 30-40 \times 12; sporidiis cylindraceo-ellipsoideis parvis, hyalinis, sæpius grosse 4-guttulatis, ad medium 1-septato-constrictulis, 13-14 \times 4.

Hab. in ramulis siccis Chusqueæ valdiviensis, Bahia de Carracol Chile Amer. austr.

7. *Glonium Cumingii* Speg., Fungi Chilenses (1910) p. 113 cum icon. 5210

— Maculis ellipticis indeterminatis cinerescens; peritheciis laxè gregariis, erumpenti-subsuperficialibus, parvis, linearibus, utrinque acutiusculis, rima angusta dehiscentibus, subcarbonaceis, 0,3-1,5 mm. long., 0,1-0,25 mm. lat. et alt.; ascis ovoideis v. ellipsoideis, sessilibus v. brevissime crasseque pedicellatis, pseudoparaphysibus subcoalescentibus obvallatis, 40-50 \times 20-30; sporidiis conglobatis subclavulatis submediocribus, hyalinis, 1-septato-constrictulis (an postremo 3-septatis et fumosis?), 20-24 \times 6-7.

Hab. in culmis emortuis putrescentibus Chusqueæ Cumin-

gii, Cerro Caracol de Concepcion, Cerro Alegre de Valparaiso, Chile Amer. austr. — An *Glonii Chusqueæ* Speg. forma?

ACTIDIUM Fr. — Syll. II p. 738.

1. *Actidium pulchellum* Rick, Broteria IV (1905) p. 161. — Stromati- 5211
bus (peritheciis?) primitus nigris, *Asterinæ* formam imitantibus cum
3-4 radiis, dein dehiscentibus ad modum *Hysterii* et discum palli-
dum exhibentibus; ascis 100-125 \times 8-10; sporidiis octo, filiformibus
60-75 \times 1, non septatis (uti videtur); paraphysibus paucis, versus
apicem 3 μ . latis, non ramosis, ex ascis abortivis reductis.

Hab. in foliis cujusdam arbusti incogniti, Torres Vedras Lusi-
taniæ. — Vix *Actidii* species, nam sporidia non hyalodidyma, sed
filiformia. Potius *Coccomycetis* sp.

Sect. 3. Phæodidymæ.

LEMBOSIA Lév. — Syll. II p. 741, IX p. 1104, XI p. 387, XIV
p. 712, XVI p. 663, XVII p. 897.

1. *Lembosia Dipterocarpi* P. Henn., Hedwigia XLVII (1908) p. 261. 5212
— Maculis mycelii epiphyllis, rotundatis, atro-crustaceis, sparse
gregariis, ca. 2 mm. diam.; peritheciis gregariis, linearibus, flexuo-
sis, atris, sæpe anastomosantibus v. ramosis, longitudinaliter rimo-
so-dehiscentibus; ascis ovoideis vel ellipsoideis, 40-55 \times 30-40, 8-
sporis, obtusis; sporidiis conglobatis, ellipsoideis v. ovoideis, medio
1-septatis, constrictis, intus granulatis, atris, 26-30 \times 16-20.

Hab. in foliis *Dipterocarpi grandiflori*, Luzon, Prov.
Bataan, Lamao ins. Philippin. (COPELAND).

2. *Lembosia Erythrophlæi* P. Henn., Engl. Jahrb. XXXVIII (1905) 5213
p. 115. — Peritheciis superficialibus sparsis, dimidiato-scutellatis,
ellipsoideo-oblongis, atro-fuscis, 350-450 \times 200-250, longitudinaliter
rimoso-dehiscentibus, contextu celluloso, atro-castaneo, hyphis ra-
diatim circumdatis atro-fuscis, pseudopodiis subovoideis, alternan-
tibus, 15-18 \times 10-14; ascis ovoideis v. ellipsoideis, apice tunicatis,
octosporis, 50-70 \times 40-50; sporidiis conglobatis, ellipsoideis v. ovoi-
deis, 2-guttulatis, medio 1-septatis, constrictis, atris, 30-35 \times 12-18.

Hab. in foliis *Erythrophlæi guineensis*, Dar-es-Salâm
Zanzibar Africae (HOLTZ).

3. *Lembosia congregata* Syd., Ann. Mycol. VIII (1910) pag. 40. — 5214
Hypophylla, maculis indistinctis vel subnullis insidens; peritheciis
Syll. fung. XXII (XI-1912)

innato-superficialibus, carbonaceis, in greges orbiculares atros subiculo radiante fibrilloso ex hyphis obscure brunneis denseque intertexis composito circumdatos, 3-5 mm. latos dense confertis, subinde confluentibus, primitus globulosis, dein ellipticis vel angulatis, ca. 300-500 μ . longis, atris, rima longitudinali dehiscentibus; ascis late clavatis, apice rotundatis incrassatisque, 45-60 \times 24-32, 2-4-sporis; sporidiis distichis, ellipsoideo-oblongis, utrinque rotundatis, medio valde constrictis, primo hyalinis, tandem obscure brunneis, 26-32 \times 13-18; paraphysibus numerosis, filiformibus, hyalinis.

Hab. in foliis *Rhododendri* spec., Banajao, provincia of Laguna, Luzon, ins. Philipp. (C. B. ROBINSON). — *Lemb. Albersii* affinis sed sporidiis crassioribus inasco binis v. quaternis mox dignoscenda.

4. *Lembosia Drymidis* Lév. — Syll. II, p. 743, IX, p. 1105 — var. 5215
baccharidicola Rehm., Ann. Mycol. V (1907) p. 532; VII (1909) p. 407. — Maculis mycelii epiphyllis, orbicularibus, haud rite conspicuis, fusco-nigritulis, 2-4 mm. diam.; hyphis mycelium tenuissimum formantibus, subramosis, fuscis, 5 μ . crassis, ex basi peritheci centrifugaliter repentibus; peritheciis primitus semiglobosis, 2-6 in centro mycelii arcute adnatis, rimis trigonis apertis, 0,1-1,5 mm.; ascis ovoideo-globosis, 40 \times 30, octosporis; sporidiis oblongis, utrinque rotundatis, primitus hyalinis, dein fuscis, medio septatis et subconstrictis, utraque cellula sæpe 1-guttata, 18-20 \times 9-10.

Hab. in foliis *Baccharidis* vivis, Nossa Senhor, Sao Paulo Brasiliæ (USTERI). — A typo differt peritheciis epiphyllis dispersis, sessilibus in maculis late diffusis nigro-fusculis, primitus hemisphæricis, clausis, dein fere semper 3-4-gonis, rarissime sublongatis.

5. *Lembosia Coccolobæ* Earle, Bull. of the New York Bot. Gard. 5216
 (1904) pag. 301. — Epiphylla; maculis brunneis, primum sæpe stellatis, dein orbicularibus, 4-6 mm. v. confluentibus et subeffusis; mycelio sparso, fusco, mox late effuso, hyphis continuis vel sparse septatis, hinc inde subramosis et anastomosantibus, angustis, 3-4 μ . cr.; hyphopodiis sessilibus, ovoideis, obscure fuscis, parvis, circ. 7 \times 5; ascomatibus sparsis, discretis, nigris, linearibus, rectis v. curvulis, apice obtusis, 300-600 \times 100, subiculo angusto, ex filis mycelialibus 15-40 μ . long. constituto; ascis ellipsoideis 35 \times 20; sporidiis inordinatis, curvatis, inæqualiter uniseptatis, hyalinis, 16 \times 7.

Hab. in foliis vivis *Coccolobæ* uviferæ, Porto Rico Amer. centr. (HELLER).

6. *Lembosia microtheca* Theiss., Beih. Bot. Centralbl. Bd. XXVII 5217 (1910) Abt. II, p. 411. — Maculis epiphyllis vix perspicuis, lenissime fuliginascentibus, minutis, 2-4 mm. diam., indeterminatis; mycelio vix sub lente visibili, ex hyphis sparsis, laxè opposito-ramosis, læte fuligineis, 2,5 μ . cr. composito; hyphopodiis raris, alternis, ramuliformibus, estipitatis, rectis, cylindraceis, 5-8 \approx 2; peritheciis densiuscule aggregatis, aterrimis, linearibus, rectis vel curvulis, dimidiato-convexis, contextu brunneo subconcentrice radiante, rima tenuissima dehiscentibus, longitudine variabilibus, 180-300 \approx 70-90; ascis oblongo-ellipsoideis, 25-30 \approx 9-11, interdum deorsum paullo angustatis et proinde subclavatis, 8-sporis; sporidiis demum brunneis, distichis, oblongis, 9-10 \approx 2,5-3, loculo inf. paullo angustiore et longiore; paraphysibus copiosis simplicibus filiformibus flexuosis, ascos obvallantibus.

Hab. in foliis *Gæppertiæ* hirsutæ, Sao Leopoldo Rio Grande do Sul Brasilæ.

7. *Lembosia Rolfsii* W. T. Horne, Bull. Torr. Bot. Cl. (1905) p. 69, 5218 cum icon. — Maculis 1-2 cm. long. caulem plus minus ambientibus, e flavo-brunneo demum nigricantibus; hyphis continuis atrobrunneis, parce ramosis, haustoriis brevibus hinc inde præditis; peritheciis irregulariter sparsis, oblongis, simplicibus v. furcatis v. triradiatis, sæpe curvis, 350-1000 \approx 160, nigris, latiuscule sulcatorimosis; ascis late clavatis v. elongato-ovatis, basi obtuse tenuatis, 20-40 \approx 8-15, apice dehiscentibus; paraphysibus copiosis, septatis, apice obtusis; sporidiis suboctonis, biseriatis vel inordinatis, oblongo-ellipsoideis, constricto-1-septatis, utrinque obtusulis, hyalinis, 2-guttatis v. demum minute 2-4-guttulatis, nigricantibus, 10-16 \approx 4-5.

Hab. in caulibus adhuc viridibus *Vanillæ* planifoliæ, Miami Fla. Amer. bor. (ROLFS).

8. *Lembosia Saccardoana* Bacc., Funghi Eritr., Ann. Bot. IV (1906) 5219 p. 275, tab. X, fig. 7. — Epiphylla; maculis ellipticis rubiginosis, sæpe longitudinaliter seriatis, 5-7 mm. longis, et 2-3 mm. latis; peritheciis rugosis, atris, punctiformibus vel ellipticis, 150-200 μ . latis, sparsis, nigris, superficialibus, subiculo tenui fibrilloso atroviridi insidentibus; ascis ovato-rotundis, 70 \approx 42, paraphysatis; sporidiis rotundis, didymis, ad medium leviter constrictis, tandem castaneo-fuscis, 28 \approx 14.

Hab. in foliis *Sansevieræ* sp., Mahdet in montibus Marmaroba Erythrææ (PAPPI).

9. *Lembosia pachyasca* Bres., in Rick, Fungi austro-amer. III-IV, 5220 n. 76, Ann. Myc. IV (1906) p. 312. (Nomen nudum).

Hab. in foliis *Myrsines* spec. in Brasilia America austr.

10. *Lembosia similis* Bresad., in Rick Fungi austro-amer. III-IV, 5221 n. 60, Ann. Myc. v. IV (1906) p. 310. (Nomen nudum).

Hab. in Brasilia, America austr.

TRYBLIDIUM Duf. — Syll. II p. 740, IX p. 1103, XI p. 387, XVI p. 662 et 1145.

1. *Tryblidium argentinense* Speg., An. Mus. Nac. Buenos Aires t. XIX 5222 (1909) p. 437. — Peritheciis sæpius laxè gregariis erumpenti-superficialibus tumidis, elongato-ellipsoideis 1-3 mm. long., 0,6-0,8 mm. diam., rima profunda percursis, coffeicoloribus; ascis cylindraceis basi crasse breviterque pedicellatis, 180-200 \times 15, sæpius tetrasporis, dense paraphysatis; sporidiis monostichis, cylindraceis 1-septatis rectis v. lenissime inæquilateralibus, 36-38 \times 11-13, primo hyalinis dein flavidis serius opace fuliginis.

Hab. ad ramulos emortuos *Heteropteridis* cujusdam in Colle Cerro San Bernardo, Salta, Argentina, America austr.

2. *Tryblidium guaraniticum* Speg. — Syll. IX, p. 1103 — var. *majus* 5223 Speg., Annal. Mus. Nac. Buenos Aires t. XVII (1908) p. 131. — Ascis 200 \times 15-20; sporidiis 28-30 \times 10-12.

Hab. vulgatum ad ramos dejectos putrescentes *Ilicis* *paraguariensis*, Rep. Argentina Amer. austr.

3. *Tryblidium Elasticæ* Koord., Botan. Untersuch. (1907) pag. 162, 5224 fig. 5. — Ascomatibus coriaceis, patellarioides, primum hypophlœoideis, dein emergentibus, vix 1,5 mm. diam.; marginibus subintegris; subsessilibus, sparsis, glabris, in sicco fuscis; ascis clavatis, 4-6-sporis, paraphysatis, 70 \times 30; sporidiis oblongatis, utrinque rotundatis, cribroso-muriformibus, leviter coloratis v. hyalinis, 35-35,5 \times 14-15; paraphysibus copiosis, valde conglutinis et confluentibus, epithecium crassum, fuscum formantibus.

Hab. in cortice vulnerato *Fici* *elasticæ* prope Karanggajan prov. Kedu, Java (KOORDERS).

4. *Tryblidium Pandani* Patouill., Bull. Soc. Myc. France XXII (1906) 5225 p. 53. — Epiphyllum, sparsum, minutum, vix 0,5 mm. cr.; peritheciis erumpentibus, fusoideis, simplicibus v. furcatis, rectis v. curvulis, disco fusco-atris, extus aterrimis; ascis brevibus, 45 \times

20, octosporis, copiose paraphysatis; sporidiis brunneis, ovoideis, medio 1-septatis constrictisque 15-18 \times 8.

Hab. in foliis Pandani, Rikitea Polynesiae.

Sect. 4. Hyalophragmiæ.

GLONIELLA Sacc. — Syll. II p. 765, IX p. 1112, XI p. 388, XIV p. 717, XVI p. 666, XVII p. 903.

1. *Gloniella insularis* Vouaux, Bull. Soc. Mycol. Fr. (1910) p. 156. — 5226
Peritheciis gregariis, superficialibus, elongatis, utrinque attenuatis rotundatisque, rectis v. varie curvulis, rima longitudinali tenui sese aperientibus, plerumque bisulcatis, nigris, 1,5-3 mm. long., 0,75 mm. latis; ascis cylindraceis, estipitatis. 125-140 \times 11, octosporis; sporidiis uni-biseriatis, hyalinis, primum uniseptatis, deinde 5-septatis, tertio loculo latiore, singulo loculo guttulato; fusoideis, utrinque attenuatis rotundatisque, sed inferiore parte tenuiore, 18-26 \times 6-8; paraphysibus paulo longioribus quam ascis, ramosis, massa gelatinosa agglutinatis.

Hab. in vetusto cortice ignoto, Ile des Pins Nova Caledonia (LE RAT). — *Gl. pseudocommæ* Rehm affinis sed peritheciis atque ascis majoribus, sporidiis hyalinis nec flavidulis, 5-septatis nec 3-7-septatis.

2. *Gloniella araucana* Speg., Fungi Chilenses (1910) p. 115. — Pe- 5227
ritheciis dense gregariis subsuperficialibus, minutis linearibus, rima parum profunda percursis, atris, carbonaceis, 0,3-1 mm. long., 0,15-0,20 mm. lat. et alt.; ascis subclavatis breviter cuneato-pedicellatis, parce pseudo-paraphysatis, 100 \times 20-22; sporidiis fusoideis, hyalinis, primo 4-blastis, dein triseptatis, ad medium leniter constrictis, submajusculis, 40 \times 8-10.

Hab. in culmis siccis subputrescentibus Cusqueæ Cumin-gii, Cerro Alegre de Valparaiso, Chile Amer. austr.

MERRILLIOPELTIS P. Henn., Hedwigia XLVII (1903) p. 261 (Etym. a cl. MERRILL). — Perithecia subinnato-superficialia, orbiculari-scutata, longitudinaliter rima angustissima dehiscentia, cornea; ascis cylindracei, octospori, paraphysati; sporidia longe fusoidea, 3-pluriseptata, hyalina.

1. *Merrilliopeletis Calami* P. Henn., l. c. p. 262. — Peritheciis inna- 5228
to-superficialibus, dense gregariis, orbiculari- v. ellipsoideo-scuta-

tis, cocciformibus, brunneis, 1,5 mm. c. longis, 1 mm. latis, longitudinaliter rima angustissima dehiscentibus, contextu corneo brunneo v. fusco; ascis longe cylindraceis, vertice obtuso-rotundatis, 240-260 \times 6-7, 8-sporis, paraphysatis; sporidiis longe fusoides, utrinque acutis, hyalinis, primo medio 1-septatis, deinde 3-pluriseptatis subconstrictis, 50-75 \times 4-5.

Hab. in truncis Calami sp., Mindoro, Mt. Halcon, ins. Philippin. (MERRILL).

PSEUDOGRAPHIS Nyl. — Syll. II p. 769, IX p. 1116, XIV p. 717, XVII p. 905.

1. **Pseudographis Orni** Rehm, Contr. Myc. Hung. (Növ. Közl. (1905) 5229 p. 4). — Peritheciis erumpentibus, mox sessilibus, dispersis, primitus globosis, clausis, dein urceolatis, crasse marginatis, demum ex orbiculari hysteriformiter elongatis et discum labiis medio distantibus denudantibus, atris, glabris, subnitidis, 120 \times 25, octosporis; sporidiis ellipsoideis, transverse, 3-5-septatis, quaque cellula guttam 1 magnam includente, ad septa subconstrictis, hyalinis, 30-40 \times 12-15, distichis; paraphysibus filiformibus, apice 3 μ . cr. et cæruleis; epithecium crassum formantibus; hypothecio flavidulo; excipulo crasso, parenchymatico, nigro.

Hab. in cortice Fraxini Orni supra balnea Herculis (Herkulesfürdő) Hungariæ (Lorke, 1872). — Perithecia exsiccata labiis sæpe arcte conniventibus fere hysterioidea, interdum striatula. An *Cenangellæ Fraxini* propinqua?

2. **Pseudographis intermedia** Rehm, Ann. Mycol. VI (1908) p. 313. 5230 — Peritheciis dispersis, oblongis, sub peridermio verruciformiter elevato clausis, innatis, dein eo longitudinaliter discisso et adhærente labiisque vix distantibus apertis, demum super peridermium prominentibus, disco plerumque oblongo, rarius orbiculari plano, margine irregulariter subcrenulato cinctis, postremo fere sessilibus, atris, extus glabris, irregularibus, 1-1,5 mm. longis, 0,5-1 mm. latis; ascis cylindraceis, apice subtruncatis, c. 200 \times 15, octosporis; sporidiis fusiformibus transverse 5-7-septatis, hyalinis, 25-30 \times 6-7, strato mucoso 5-7 μ . lato obductis, 1-stichis; paraphysibus filiformibus, septatis, 2 μ . cr., versus apicem dilutissime fusciculis, haud incrassatis, scabriusculis; hypothecio fuseidulo; excipulo parenchymatico.

Hab. in cortice Thujæ v. Cupressi sp. (Cedar) in M. Ta-

coma Wash. Amer. bor. (S. A. HARPER). — A *Pseudogr. pinicola* sporidiis monostichis, Jodo non tinctis, strato mucoso obductis probe dignoscenda.

Sect. 5. Phæophragmiæ.

HYSTERIUM Tode em. — Syll. II p. 743, IX p. 1108, XI p. 387, XIV p. 715, XVI p. 664, XVII p. 907.

1. *Hysterium chilense* Speg., Fungi Chilenses (1910) p. 117. — Pe- 5231
 ritheciis sparsis v. plus minusve gregariis, longitudinalibus, subsuperficialibus, linearibus, utrinque obtusiusculis, parvis, rima angusta impressa percursis, atris, carbonaceis, 0,5-1,5 mm. long., 0,25-0,35 mm. lat. et alt. (in *Lardizabala*?), 0,4-1 mm. long., 0,20-0,30 mm. lat. et alt. (in *Lithræa*); ascis obclavatis brevissime crasseque pedicellatis, densiuscule paraphysatis, 70-80 \approx 10-16; sporidiis distichis submedioeribus, subcylindraceis, 3-septato-constrictulis, fuligineis, loculis duobus interioribus obscurioribus, 16-22 \approx 5-6.

Hab. in sarmentis siccis vel fere putridis *Lardizabalæ*?, Cerro Caracol de Concepcion, et in ramis *Lithrææ causticæ* Cerro Alegre de Valparaiso, Chile Amer. austr.

2. *Hysterium graphideum* Speg., An. Mus. Nac. Buenos Aires t. XIX 5232
 (1909) p. 438. — Peritheciis 3-5 dense constipatis, linearibus, non v. vix flexuosis 0,5-1 mm. long., 100-150 μ . lat., rima latiuscula dehiscentibus, matrice leniter dealbata insidentibus, nigris, glabris, opacis; ascis subclavulatis breviter crasseque pedicellatis, 60 \approx 12, octosporis, dense paraphysatis; sporidiis distichis subcylindraceis, 3-septatis, 20 \approx 6, ad septa, ad medium validius, subconstrictulis, primo hyalinis dein chlorinis.

Hab. ad truncos cariosos vetustos *Corallo dendri* (*Erythrinæ*) cristagalli, Isla Santjago prope La Plata, Argentina America austr. — Species habitu valde lichenoso sed thallo omnino destituta; jodi ope membrana ascorum lenissime cærulescit.

3. *Hysterium batucense* Speg., Fungi Chilenses (1910) p. 116, cum 5233
 icon. — Peritheciis ligno denudato cinerescente innato-erumpentibus linearibus utrinque subacutiusculis, rima tenui impressa percursis, atris, glabris carbonaceis, 0,5-2 mm. long., 0,25-0,30 mm. lat. et alt.; ascis subcylindraceis, breviter cuneato-pedicellatis, parvissime paraphysatis, octosporis, 120-130 \approx 20-25; sporidiis mono-

v. distichis, e cylindraceo subellipsoideis, mediocribus, typice 5-septatis, loculo mediano supero non v. leniter crassiore, fuligineis, 28-32 \times 12-13.

Hab. in ramis siccis Proustiae pungentis in collibus pr. Batuco Chile Amer. austr.

4. *Hysterium pulicare* Pers. — Syll. II, p. 743. — *H. Totaræ Sacc. 5234 subsp. n., Ann. Mycol. VI (1908) p. 554. — A typo differt peritheciis multo minoribus, nempe 700 \times 400 et levioribus, sporidiis tamen non dissimilibus sed paullo brevioribus, nempe 18-19 \times 5,5-6, fuligineis, utrinque vero pallidioribus; ascis 90-100 \times 11.

Hab. in cortice levi Podocarpi Totaræ in Horto bot. Patavino, Jul. 1908 (AUG. NALESSO). — Ambigit inter *H. vulgare* De Not. et *H. pulicare* Pers.

5. *Hysterium samoëense* v. Höhnelt, Fragm. z. Mykol., Sitzb. k. Ak. 5235 d. Wiss. Wien, Bd. CXVI, Abt. I (1907) p. 131. — Peritheciis superficialibus, arcte gregariis, linearibus, nigris, plerumque curvulis, $\frac{1}{4}$ -1 mm. long., confluyendo usque ad 3 mm. long., 50-120 μ . latis, utrinque acutis, circ. 80 μ . altis, nigris, carbonaceis, rima angusta apertis et discum nigro-brunneum ostendentibus; paraphysibus crassis, firmis, epithecium violaceo-brunneum efformantibus; ascis ovoideis, supra fortiter incrassatis, 32 \times 16, suboctosporis; sporidiis polystichis, diu hyalinis dein olivaceo-brunneis, pellucidis, elongato-clavatis, utrinque rotundatis, 4-5-locularibus, ad septa non constrictis, cellulis terminalibus plerumque crassioribus, 15 \times 5.

Hab. in ligno indurato, Leolomuenga, Upolu Samoa (RECHINGER).

6. *Hysterium Hoyæ* P. Henn., Hedwigia XLVII (1908) p. 261. — 5236 Peritheciis amphigenis, sparse gregariis, oblongis, rectis v. curvatis, utrinque obtusis, atris, longitudinaliter rimose dehiscentibus, 180-220 \times 80-100; ascis oblongis v. clavatis, 8-sporis, 24-26 \times 10-15; sporidiis subtristichis v. conglobatis, fusoideis v. clavatis, 3-septatis, fuscis 10-14 \times 3-3,5.

Hab. in foliis Hoyæ sp., Mindanao, Davao ins. Philippin. (COPPELAND).

7. *Hysterium Velloziæ* P. Henn., Hedwigia XLVII (1908) p. 269. — 5237 Peritheciis sparsis v. gregariis, superficialibus, elongatis v. linearibus, interdum curvulis, leviusculis, atro-opacis, usque ad 1 $\frac{1}{2}$ mm. longis; ascis clavatis, obtusis, 8-sporis, 120-130 \times 18-20, paraphysibus copiosis, superantibus, filiformibus, hyalinis, ca. 2 μ .

crassis; sporidiis subdistichis, fusoides, 15-20-septatis, fuliginis, 35-50 \times 12-13.

Hab. ad truncum *Vellozia* sp., Ouro-Preto, 1400 m. alt. (SCHWAKE 1892).

8. *Hysterium angustatum* Alb. et Schw. — Syll. II, p. 746. — var. 5238
lophioides Rehm, in Rehm et Rick, *Broteria* V (1906) p. 225. —
Peritheciis dispersis v. 3-5 gregariis, sessilibus, linearibus, obtusis,
rectis, raro curvulis, lophioides non conchiformibus, tenuissime
transverse striatis, rima angustissima percursis, nigris, basim ver-
sus fusciscentibus, crasse carbonaceis, 1-3 mm. long., 0,4 mm. lat.,
1-3 mm. alt.; ascis clavatis, 150 \times 8-9, octosporis; sporidiis cylin-
draceis, utrinque obtusis, 3-septatis, subconstrictis, cellula secunda
sæpe sublatisiore, fuscidulis, 18 \times 3-3,5, distichis; paraphysibus fili-
formibus epithecium coloratum non formantibus.

Hab. ad lignum in Brasilia (Doct. RICK S, J.).

9. *Hysterium* ? *Cyper*i Engelh Abhandl. Senckenb. nat. Ges. XXIX 5239
(1908).

Hab. in pliocæne super. in Germania.

Hysterii species dubiæ sequentes enumeratæ sunt in Sylloge XIX,
pag. 962: *Hysterium arachnoideum* Schum. — *H. bilabiatum* Tode
— *H. cæruleum* Tode — *H. candidum* Tode — *H. quadrilabiatum*
Tode — *H. rameale* (Fr.) Sacc. et Trav., *Xyloma rameale* Fr. Obs.
mycol. II, t. VIII, f. 6 (sine diagnosi).

TRYBLIDIELLA Sacc. — Syll. II p. 757, IX p. 1110, XI p. 388, XVI
p. 665, XVII p. 908.

- 1 *Tryblidiella argentinensis* Spegazz., Anal. Mus. Nac. Buenos Aires 5240
t. XIX (1909) p. 438. — Peritheciis per corticem erumpentibus
sæpius ellipsoideis, rima latiuscule hiante dehiscentibus, primo sub-
araneosis dein glabratibus; ascis cylindræis basi cuneato-pedicellatis,
160-200 \times 10-12, 4-6-8-sporis, paraphysatis; sporidiis e cylindræo
subfusoides, subcymbiformibus, 32-40 \times 8-10, 1-2- v. sæpius 3-se-
ptatis, e ferrugineo fuliginis.

Hab. ad ramulos dejectos putrescentes *Allophylli* cujusdam
in Parque Roca, Tucumán, Argentina America austr.

2. *Tryblidiella mandanaensis* P. Henn., Hedwigia XLVII (1908) 5241
p. 261. — Peritheciis erumpentibus, cæspitosis, subcoriaceis, ob-
longis, rectis v. curvulis, atris, labiis tumidis levibus, 1-2,5 mm.
c. longis, 0,3 mm. latis, disco atro-fusco, levi; ascis subclavatis

obtusis, 8-sporis, p. spor. $140-160 \approx 17$, paraphysibus obvallatis, hyalinis; sporidiis oblongis, subcurvulis, utrinque obtusis, 3-septatis, atro-brunneis v. castaneis, oblique monostichis, $20-30 \approx 10-12$.

Hab. ad corticem arboris, Mindanao, Zamboanga, San Ramon ins. Philippin. (COPELAND).

3. *Trybliidiella tetraspora* Masee, Kew. Bull. n. 7 (1906) p. 257. — 5242
Peritheciis erumpentibus, alte exertis, ellipsoideis seu subtrigonis, 2-4 mm. lat.; labiis tumidulis, atris, striatulis, intus involutis; disco plano, rufo-fulvescente; ascis cylindraceutis, apice rotundatis, tetrasporis, basi attenuato-stipitatis, $250 \approx 20$, paraphysibus densissimis longioribus, vertice fusco-fuliginis obvallatis; sporidiis monostichis, oblongo-ellipsoideis, utrinque rotundatis, triseptatis, ad septa non v. vix constrictis, brunneis dein atro-fuliginis, opacis, $50 \approx 15$.

Hab. ad ramos emortuos, Aburi Gold Coast Guinea Africæ occ. (JOHNSON).

HYSTEROPATELLA Rehm, Disc. p. 300 et 367 (Etym *Hysterium* et *Patella*). — Perithecia innato-erumpentia, atra, membranaceo-subcoriacea, oblonga v. lanceolata, demum late aperta, tenuiter marginata; disco subplano sæpe discolori. Asci breviusculi, paraphysibus ramosis apice coloratis obvallati, octospori. Sporidia oblonga v. fuscoidea, pluriseptata, demum brunneola. — Genus inter *Hysteriaceas* et *Phacidiaças* medium.

1. *Hysteropatella discolor* (Speg.) v. Höhn., Ergeb. Bot. Exp. Süd- 5243
bras. 1901, Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907)
Extr. p. 30, *Hysterium discolor* Speg. — Syll. II, p. 747 — var.
coccinea v. Höhn., l. c. — A typo distinguitur disco rotundato,
etiam in sicco aperto, subcoccineo, nec rufo-ferrugineo.

Hab. ad fragmentum ligneum pr. Butantan, Sao Paulo Brasilæ.

Sect. 6. Hyalodictyæ.

HYSTEROPSIS Rehm (1887) — Syll. IX p. 1118, XVII p. 909 — *Hysteriopsis* Speg. (1906) vix recedere videtur sporidiis amplis et creberrime septatis, denique fumosis (*).

(*) Ecce diagnosim cl. Spegazzini:

Hysteriopsis Spegazz., Micromicetas de las Cacaoyeros, Rev. Facult. Agro-

1. *Hysteropsis brasiliensis* (Speg.) Sacc. et Trott., *Hysteriopsis bra-* 5244
siliensis Spegazz., Micromic. de los Cacaoyeros in Rev. Facult.
 Agron. y Veterin. La Plata t. II (1906) p. 308, f. E. — Matrice
 sordide pallescenti-flavescente, corrugato-subtuberculosa; peritheciis
 crassis, coriaceis duriusculis innato-erumpentibus late linearibus ra-
 rius suborbicularibus, 1-4 mm. long., 0,75-1,25 mm. lat., 0,50-0,75
 mm. alt., rectis v. flexuosis sæpeque lobulatis, apicibus obtusiu-
 sculis, marginibus verticalibus epidermide matricis primo adpressa
 dein relaxata vestitis, acie acutiuscula albida, disco planiusculo v.
 concaviusculo, mox aperto pruinuloso-cinereo, per ætatem fusce-
 scente v. nigricante donata; ascis cylindraceutis antice subtruncato-
 rotundatis postice breviuscule crasseque cuneato-pedicellatis $250 \times$
 35 , paraphysibus densissimis coalescentibus apice fusco-crustosis
 obvallatis ac ægre perspicuis; sporidiis rectis distichis cylindraceutis
 subellipticis $60-80 \times 18-20$, utrinque subattenuato-rotundatis rectis
 v. lenissime curvulis, sæpius medium versus parcesissime attenuatis,
 primo cribrosis, hyalinis, serius septis horizontalibus 16-24 donatis,
 ad septa constrictulis, loculis septis verticalibus 1-3 parum mani-
 festis divisis, fumosis, postremo corrugatis difformibus atque fuscis.

Hab. in caule Theobromæ Cacao, Bahia de todos los Santos, Brasilia (HEMPEL).

2. *Hysteropsis corticola* (Fr.) Sacc. et Trav. — Syll. XIX, p. 964 — 5245
Hysterium corticola Hazsl. in Verhandl. zool.-bot. Gesell. Wien
 (1887) pag. 155, tab. 3, f. 7, non *Hyst. lineare* var. *corticola* Fr.
 Elench. II, pag. 140, quod = *Hysterium* (Hysteropatella) *Prostii*
 Duby. — Peritheciis linearibus, utrinque rotundatis, levibus, in
 cortice sessilibus, sæpius transverse positis; ascis parce filiformi-
 paraphysatis, fusoides, utrinque obtuse acutatis, basi breviter te-
 nuato-stipitatis; octosporis; sporidiis distichis oblongo-ellipsoideis,
 hyalinis, rectis, utrinque obtusulis, initio 1-septatis, mox 3-septa-
 tis, denique 7-septatis, $20-24 \times 9-11$, loculis nonnullis longitudina-
 liter 1-septatis.

Hab. in ramis corticatis Pruni Padi, Eperies Hungariæ.

nom. y Veter. La Plata t. II (1906) nn. 4-6, p. 308. — Perithecia erumpenti-
 superficialia, crassa, extus levia, glabra, mox rimose dehiscentia, atque late hian-
 tia, epithecio planiusculo cinereo acute limitato donata; asci cylindraceuti dense
 paraphysati 8-spori; sporidia majuscula, elliptico-cylindraceuta, primo cribrosa,
 hyalina dein dense murali-septata, fumosa. — Genus eximium lacunam n. 68
 Hysteriearum Tabul. comp. (Syll. XIV, p. 26-27) replens, habitu externo *Colpo-*
mati simillimum.

GLONIOPSIS De Not. — Syll. II p. 772, IX p. 1116, XIV p. 717, XVII p. 909.

1. **Gloniopsis Lojkæ** Rehm, Ann. Mycol. IV (1906) p. 339. — Peri- 5246
 theciis ligno late dealbato innatis, parallele seriatis, dispersis, primitus globosis et plane obtectis, dein poro minuto apertis, demum hysteriiformibus, rima longitudinali apertis, utrinque acutatis, labiis crassis medio distantibus discum planum atrum denudantibus, senilibus supra ligni superficiem derasam exstantibus, excipulo crasso carbonaceo, ligno arcte connato, 0,5-2 mm. long., 0,5-2 mm. lat.; ascis clavatis, apice rotundatis, 4-8-sporis, c. $100 \approx 15$; sporidiis ellipsoideis, transverse 3-5, longitudinaliter plerumque 2-septatis, ad septa haud contractis, subhyalinis, 15-18 \approx 8-9, distichis; paraphysibus filiformibus, septatis, ad apicem subramosis et fusciculis, epithecium fuscum formantibus.

Hab. ad lignum Fraxini Orni in monte Treskovác in Banatu prope Danubium (ЛОЖКА).

2. **Gloniopsis araucanæ** Speg., Fungi Chilenses (1910) p. 118, cum 5247
 icon. — Maculis nullis; peritheciis sparsis, erumpenti-superficialibus linearibus utrinque rotundatis, atris, coriavello-membranaceis, opacis, 0,75-1 mm. long., 0,25-0,30 mm. lat. et alt.; ascis cylindraceo-subclavulatis breviter crasseque cuneato-pedicellatis, paraphysibus densis submucoso-coalescentibus obvallatis, $100 \approx 20$, octosporis; sporidiis cylindraceo-ellipsoideis, distichis, transverse 7-, longitudinaliter 1-septatis, ad septa tria primaria constrictulis, hyalinis, 24-28 \approx 12-13.

Hab. in scapis siccis subputridis Francoæ sonchifoliæ prope Bahía de Corral Chile Amer. austr.

3. **Gloniopsis xylogramma** Vouaux, Bull. Soc. Mycol. Fr. (1910) p. 157. 5248
 — Peritheciis gregariis, linearibus, utrinque attenuatis atque acutis, emergentibus v. superficialibus, 1-3 mm., plerumque 2 mm. long., 0,25 mm. latis, nigris, rima longitudinali tenui hiantibus; ascis elongatis, estipitatis, $60 \approx 20$, octosporis; sporidiis uni-biseriatis, hyalinis, ovoideis, transverse triseptatis, cum uno septo longitudinali, recto v. obliquo, in singulo loculo, 11-14 \approx 5-8; paraphysibus numerosissimis,asco paulo longioribus, agglutinatis.

Hab. in ligno putrescente ignoto, Nouméa Nova Caledonia (CACOT).

4. **Gloniopsis ambigua** Sacc., in Ann. Myc. X (1912) p. 317. — Per- 5249
 ritheciis gregariis, longitudinaliter parallelis, rectis, lineari-lanceolatis, nigris, depressis, 1-1,5 mm. long., 0,3 mm. lat., rima angu-

stissima exaratis; ascis clavatis, breviter sensim stipitatis, 75-80 × 10-12, apice obtusatis, 6-8-sporis; paraphysibus filiformi-clavulatis tertia parte superiori opace nigricantibus et epithecium atrum formantibus; sporidiis oblongo-clavulatis, utrinque obtusulis, 5-septato-muriformibus, medio non v. vix constrictis, 16-17 × 5-5,5, hyalinis, faretis.

Hab. in ramis decorticatis putrescentibus *Quercus* sp. (ut videtur), Castel Gandolfo prope Romam vere 1904 (D. SACCARDO). — Ab affini *Gl. Cisti* Rehm — Syll. IX, p. 1118 — distingui videtur sporidiis clavulatis, vix constrictis, ascisque paullo minoribus, paraphysibus tertia parte superiori incrassatis aterrimis, nec non matrice.

Sect. 7. Phæodictyæ.

HYSTEROGRAPHIUM Corda — Syll. II p. 776, IX p. 1119, XI p. 389, XIV p. 718, XVI p. 668, XVII p. 912.

1. *Hysterographium fuegianum* Speg. — Syll. IX, pag. 1121 — var. 5250
intermedium Rehm in Swensk. Vet. Akad. Handl. XXV (1899) p. 11, t. 17, f. 17 (extr.). — A typo distinguitur peritheciis utrinque acutiusculis v. obtusiusculis et sæpe longioribus. nempe 2 mm. long., 0,5-0,8 mm. cr.; sporidiis elliptico-biconicis, 8-10-septatis, verticaliter quoque 2-3-septatis, strato mucoso tenuissimo obductis.

Hab. ad ramos putres *Fagi* antarcticæ, Punta Arenas Rio Grande Brasiliæ. — Forma media inter *H. fuegianum* et *H. magellanicum*.

2. *Hysterographium Elasticæ* Koord., Botanisk. Untersuch. (1907) 5251
p. 163, fig. 7. — Peritheciis oblongis, erumpenti-superficialibus, atris, coriaceis, labiis tumidis latiuscule hiantibus, 1-2 mm. longis et 150-300 μ . latis; ascis clavatis, apice rotundatis, haud incrassatis, octosporis, 90-100 × 20-25, sessilibus; sporidiis distichis, oblongis, utrinque rotundatis, 28-30 × 10-13, 6-9-septato-muriformibus medio haud constrictis, pallide olivaceo-fuscescentibus; paraphysibus filiformibus,asco longioribus, apice clavatis.

Hab. in cortice vulnerato *Fici* elasticæ prope Karangga-jam prov. Kedu Java (KOORDERS).

3. *Hysterographium varians* Vouaux, Bull. Soc. Myc. Fr. (1910) p. 157. 5252
— Peritheciis irregularibus, primum ovoideis deinde elongatis, fusiformibus v. etiam linearibus, utrinque acutiusculis v. rectis v.

sæpius varie curvulis, dense gregariis, late apertis, utrinque unisulcatis, parvis, primum 0,4 mm. long., 0,2 mm. latis, deinde 0,5-1 mm. long., 0,2 mm. latis, nigris; ascis elongato-claviformibus, estipitatis, octosporis, $90 \approx 14$; sporidiis biseriatis, ellipsoideis, utrinque rotundatis, medio constrictis, septis transversis præcipuis 3, secundariis 1-2 v. etiam 4; septo longitudinali 1 in loculis mediis, rarius etiam in loculis extremis, $20 \approx 8$.

Hab. in vetusto cortice ignoto, Indo-China.

4. *Hysterographium elongatum* (Wahl.) Corda — Syll. II, p. 777 — 5253
var. *orobicum* Rota-Rossi, III Contr. Mic. Bergamo, Atti R. Ist. bot. Pavia ser. II, v. XIII p. 290 (extr. 1907). — A typo differt sporidiis recte, demum leniter oblique, monostichis, transverse 5-septatis, medio non vel vix constrictis, $20-25 \approx 10-12$.

Hab. ad lignum decorticatum, Foppenico, Bergamo Italia bor.

5. *Hysterographium Cumingii* Speg., Fungi Chilenses (1910) p. 119, 5254
cum icon. — Peritheciis laxè gregariis, innato-erumpentibus, non v. vix prominulis, anguste linearibus longiusculis, sordide fuscis, carbonaceis, 0,5-5 mm. long., 0,25-0,30 mm. lat.; ascis obclavatis subsessilibus non v. parçissime paraphysatis, $70-80 \approx 14$, octosporis; sporidiis distichis ellipsoideo-elongatis utrinque subacutiusculis, typice transverse 7-septatis, loculis uno v. altero v. omnibus septis 1 v. 2 longitudinalibus divis, fuligineis, mediocribus, e latere leviter angustioribus, $20-22 \approx 5-8$.

Hab. in culmis putrescentibus Chusqueæ Cumingii, Cerro Alegre de Valparaiso Chile Amer. austr.

Sect. 8. Scolecosporæ.

HADOTIA R. Maire, Champ. Asie Min., Bull. Soc. Sc. Nancy (1906) pag. 11 (Etym. a Doct. HADOT, mycologo vogesiaco). — Perithecia superficialia oblongata, membranaceo-carbonacea, longitudinaliter dehiscencia; asci 8-spori, cylindraceo-clavati; sporidia filiformia, hyalina, unilocularia v. septata, parallele stipitata; paraphyses filiformes. — In Tabulis comparativis generum præsens exacte occupabit n. 30 inter *Hysteriaceas* (Syll. XIV, p. 26-27).

1. *Hadotia nivalis* R. Maire, Champ. Asie Min., Bull. Soc. Sc. Nancy 5255 (1906) Extr. p. 12, fig. 2. — Peritheciis culmigenis, sparsis, nigris, nitidis, levibus, membranaceo-carbonaceis, oblongatis, utrinque rotundatis, 0,75 - 1,25 \approx 0,50 - 0,75 mm., rima perithecii

longitudinem æquante demum hiantibus; hymenio hygrophano, udo griseo, sicco albido; ascis cylindraceo-clavatis, apice conoideo, obtuso, sessilibus v. breviter pedicellatis, $80-110 \approx 8-11$; sporidiis parallele stipatis, rectis v. flexuosis, apice rotundatis, basi longe attenuatis, acutis, $50-80 \approx 1,5-2$, sæpe 1-3-septatis; paraphysibus filiformibus ascos superantibus, apice flexuosis v. circinatis.

Hab. in culmis siccis *Alopecuri textilis* Boiss. in zona alpina M. Argæi Cappadocia Anatolia. — Socia adest *Leptostromella nivalis* quæ status imperfectus esse videtur.

HYPODERMA DC. — Syll. II p. 784, IX p. 1113, XI p. 389, XIV p. 719, XVI p. 669.

1. *Hypoderma andinum* Speg., An. Mus. Nac. Buenos Aires t. XIX 5256 (1909) pag. 435, cum icon. — Peritheciis laxè gregariis innato-erumpentibus, atris, elliptico-linearibus 0,4-1 mm. long., 200-250 μ . diam., rarissime bilobis v. furcatis, per ætatem longitudinaliter dehiscentibus; ascis clavulatis basi sensim longeque attenuatis, in pedicellum subbrevisculum productis, $70 \approx 16-18$, octosporis, paraphysatis; sporidiis distichis v. oblique monostichis subbotuliformibus, leniter curvulis, $14 \approx 3-4$, hyalinis.

Hab ad ramulos nec non ad spinas vivas v. languidas *Patagonii pinifolii*, Puente del Inca, prope Mendoza Argentina America austr.

2. *Hypoderma ptarmicola* Fairm., Proc. Rochest. Ac. of Sc. IV (1906) 5257 p. 216, tab. XX, fig. 2. — Peritheciis elongatis, erumpentibus, 1-4 mm. long., primum apertis, siccis fere clausis, margine integris, regularibus, quandoque incurvatis, extus nigris, intus e rubro-brunneo brunneis, arescendo subolivaceis; ascis clavato-cylindraceis, apice angustatis, basi longe et anguste pedicellatis, $74-125 \approx 10-13$, plerumque $80-90 \approx 10$; sporidiis oblongis, rectis v. curvis, apice acutatis, $33-35 \approx 2-3$, guttulatis et septis endochromaticis spurie uniseptatis.

Hab. in caulibus siccis *Achilleæ Ptarmicæ*, Lyndonville N. Y. Amer. bor.

3. *Hypoderma Werthianum* P. Henn., Deutsche Südpolar Exped. Bd. 5258 VIII (1906) Extr. p. 9, t. I, f. 12. — Maculis pallidulis; peritheciis innatis, oblonge subpulvinatis, amphigenis, sparsis v. striiformi-gregariis, atris, membranaceis, rima longitudinali dehiscentibus, 0,6-0,8 \approx 4-5 mm. diam.; ascis subfusoides-clavatis, basi attenuato-substipitatis, vertice tunicatis obtuso-rotundatis v. subacutiusculis,

75-100 \approx 10-15, octosporis; paraphysibus filiformibus, repetito-ramosis, hyalinis, c. 2 μ . cr., apice haud incrassatis; sporidiis subtristichis v. conglobatis, bacillaribus, rectis v. curvulis, utrinque obtuso-rotundatis, interdum subattenuatis, pluriguttulatis vel septulatis, hyalinis, leviter cyanescentibus, 35-40 \approx 2-2,5.

Hab. in foliis Poæ Cookii Hook. f., Possession-Insel Crozet-Gruppe (E. WERTH).

LOPHODERMIIUM Chev. — Syll. II p. 791, IX p. 1124, XI p. 390, XIV p. 720, XVI p. 670, XVII p. 913.

1. **Lophodermium Mangiferæ** Koord., Botan. Untersuch. (1907) p. 163, 5259
fig. 6. — Peritheciis plerumque hypophyllis sparsis, innatis, plus minusve prominentibus, membranaceis, ellipsoideis, rima longitudinali dehiscentibus, 0,4-0,6 mm. longis, nudis, nigris, labiis depressis; ascis cylindraceo-clavatis, octosporis, apice obtusis v. acutis, 80-90 \approx 5-6; sporidiis parallele stipatis, filiformibus, rectis, 70-80 \approx 1, hyalinis, continuis, multiguttulatis; paraphysibus filiformibus, apice clavatis vel uncinatis vel clavato-flexuosis, ascum subæquantibus.

Hab. in foliis emortuis Mangiferæ indicæ prope Penunggalan prov. Kediri Java (KOORDERS).

2. **Lophodermium alliaceum** Feltg., Vorst. Pilzfl. Luxembg. Nachtr. IV 5260
(1905) pag. 34. — Peritheciis sparsis v. gregariis, basi immersis, elongatis, ellipsoideis v. subcircularibus, utrinque obtusis, convexis, rima angusta apertis, tenuiter marginatis, nigris opacis, striatulis 0,3-0,8 mm. long., 0,2-0,5 mm. latis; ascis clavatis, supra obtuse angustatis, basi in pedicellum attenuatis, rectis, octosporis 80-95 \approx 8, hyalinis, paraphysibus filiformibus superantibus, rectis v. incurvatis obsitis; sporidiis polystichis, acicularibus, utrinque acutatis, rectis v. curvulis, unilocularibus, guttulatis, hyalinis, inasco flavescens, 30-40 \approx 1-1,5.

Hab. in bracteis Allii oleracei, Höhenhot Luxemburgia. — *L. sphaeroideo* (A. S.) Duby affine.

3. **Lophodermium Luzulæ** Hazsl. Magyar Discom. p. 186, t. III, f. 6. 5261
— Peritheciis oblongis v. lanceolatis, rima lata apertis; ascis clavatis, breviter noduloso-stipitatis, apice obtusule-acutatis, bacillari-paraphysatis, octosporis; sporidiis polystichis, clavulato-bacillaribus, multi-pseudoseptatis, hyalinis.

Hab. in foliis languidis Luzulæ maximæ in Hungaria.

4. **Lophodermium arundinaceum** (Schr.) Chev. — Syll. II, p. 795 5262

— var. *Piptatheri* Ranojevic, Ann. Mycol. VIII (1910) p. 354. — Peritheciis ellipsoideis, apice rotundatis vel subattenuatis, nigris, rimosis, $0,3-0,5 \approx 0,20-0,25$; ascis clavatis, apice obtuse attenuatis, basi in pedicellum breviter attenuatis, $48-65 \approx 7-8$, octosporis; sporidiis filiformibus, parallele dispositis, $32-48 \approx 1$, hyalinis; paraphysibus filiformibus, septatis, supra uncinatis v. contortis, integris v. raro apice furcatis, $76 \approx 1-1,5$.

Hab. in foliis siccis *Piptatheri paradoxo* prope Krepoljin, Serbia.

Subfam. 2. Ostropeæ.

Sect. Scolecosporæ.

ROBERGEA Desm. — Syll. II p. 806, IX p. 1128.

1. *Robergea Albicedræ* (Heald et Wolf) Sacc. et Trav. — Syll. XX, 5263 p. 695 — *Cyanospora Albicedræ* Heald et Wolf, Mycologia (1910) n. 5, p. 209-210, t. XXXI et f. 1-3 pag. 206-210. — Pustulis stromaticis in areis corticis v. ligni dealbatis oblongo-lenticularibus, obtuse prominulis, laxe gregariis v. 2-3-coacervatis, 1-2 mm. long.; peritheciis 1-2 in quoque stromate, sæpius solitariis, 825-1200 \approx 260-400, horizontaliter elongatis, tenuiter membranaceis, omnino immersis, in ostiolum laterale obtusulum tenuatis; ascis cylindraceis 700-1100 \approx 8-10, deorsum leviter tenuatis, apice obtusis tunica incrassata, supra basim denique fissis erumpentibusque; paraphysibus filiformibus, 1 μ . cr.; sporidiis filiformibus varie curvatis v. contortis, crebro multiseptatis, 600-1000 \approx 3, ex hyalino cyaneis, articulis cuboideis paullo longioribus quam latis.

Hab. in cortice v. ligno decorticato *Juniperi* (Sabinæ) sabinoidis, Texas usque ad Mexicum. — Est certe *Robergeæ* species, diversa tamen videtur a speciebus jam cognitis.

2. *Robergea unica* Desm. — Syll. II, p. 806 — var. *divergens* Rehm 5264 in Strasser Verh. k. k. zool.-bot. Ges. Wien LVII (1907) p. 324. — Peritheciis *Sphaeriæ*-formibus sub cortice denigrato ligno insidentibus, dein erumpentibus et excipulum albo-pruinose 1,5 mm. latum exerentibus, disco subrotundo nigro, in portum minutum apertis; sporidiis distincte septatis.

Hab. in ramis siccis Piri Mali, Sonntagberg Austriæ inf.
Syll. fung. XXII (XI-1912)

*Subfam. 3. AcrospERMæ.**Sect. ScolecospORæ.*

ACROSPERMUM Tode Syll. II p. 807, IX p. 1128, XIV p. 723, XVI p. 1146.

1. **AcrospERMUM ochraceum** Syd., Ann. Mycol. V (1907) p. 361. — 5265
Peritheciis sparsis, solitariis vel subinde binis trinis basi connexis, erectis, clavatis, valide compressis, ochraceis, basi sæpe paullo dilutioribus, glabris, apice obtusis, basi breviter stipitatis, 1-2 mm. longis, 250-400 μ . latis; ascis cylindraceis, longissimis, 200-350 \times 3-4; sporidiis filiformibus, tenuissimis, ascorum fere longitudine, hyalinis, 0,5 μ . crassis.

Hab. in foliis emortuis vel putrescentibus *Bambusæ*, Rio de Janeiro, Tijuca, Brasilia.

2. **AcrospERMUM coniforme** Spegazz., An. Mus. Nac. Buenos Aires 5266 t. XIX (1909) p. 440. — Peritheciis sparsis sæpius epiphyllis, conoideis v. sublageniformibus, 250-300 \times 100-150, glabris, fulvellis, ascis linearibus basi longe tenuiterque attenuato-pedicellatis 180-200 \times 4-5; paraphysatis, octosporis; sporidiis filiformibus fasciculatis, 140-150 \times 0,5-0,7, hyalinis.

Hab. ad folia languida *Diplachnis latifoliæ* in hortis pr. Tucumán Amer. austr.

DISCOMYCETÆ Fr. (*)

Syll. VIII p. 3, X p. 1, XI p. 391, XIV p. 378, XVI p. 695, XVIII p. 1.

Fam. 1. Myriangiaceæ NYL.

Teste cl. v. HÖHNEL, qui fungillos huc relatos, diligenter scrutatus est (Cfr. Sitz. k. Akad. Wissensch. Wien, CXVIII, Abt. I, Apr. 1909) ad hanc familiam spectantia tantum seq. genera recognoscit et ita distinguit:

I. Stroma plus minus carbonaceum, nigrum.

Eurytheca de Seyn. — Sporidia tantum transverse septata. [*Eurytheca monspeliensis* de Seyn.].

Myriangium Mont. et Berk. — Sporidia clathrata, hyalina. [*M. Duriei* Mont. et B. = *Phymatosphæria abyssinica* Pass. = *Pyrenotheca yunnanensis* Pat.; *M. Pritzelianum* P. Henn.; *M. floridanum* (Ell. et Galw.) Rehm; *M. Uleanum* (P. Henn.) v. Höhn. = *Diplothea Uleana* P. Henn.; *M. Rhipsalidis* (P. Henn.) v. Höhn. = *Diplothea Rhipsalidis* P. Henn.].

II. Stroma non carbonaceum, rubrum v. brunneum.

Kusanoa P. Henn. — Sporidia tantum transverse septata, demum colorata. [*K. japonica* P. Henn. et Shir.].

Anhellia Rac. — Sporidia clathrata, demum colorata. Asci sub superficie stromatis unistratosi. [*A. tristis* Rac.].

Uleomyces P. Henn. — Sporidia clathrata, demum colorata. Asci in stromate profunde, irregulariter sparsi. [*U. parasiticus* P. Henn., *U. purpurascens* Rehm].

(*) De anatomia et morphologia Discomycetum confer, inter recentiora, imprimis opera J. LAGARDE, *Contribution à la connaissance des Discomycètes charnus* (Ann. Mycol. IV (1906) pagg. 125-256, 58 fig. et 2 tab., et de systematica: E. BOUDIER, *Histoire et classification des Discomycètes d'Europe*. Paris 1907, et *Icones mycologicae*. Paris 1904-1910, tab. 600 col.

Quod ad genera Myriangiaceis v. affinibus attributa attinet, ecce observationes cl. v. Höhnel, Fragm. zur. Myk. VI.

Myriangium Cinchonæ Rehm est *Arthothelii* species.

Phillipsiella purpurea Ph. et Hark. = *Harknessiella purpurea* (Ph. et H.) Sacc. esset potius vocanda *Coryne purpurea* (Ph. et Harkn.) v. Höhn. l. c. f. 19 inter Bulgariaceas.

Myriangella orbicularis Zimm. est potius *Micropeltis orbicularis* (Zimm.) v. Höhn. vocanda.

Microphyma Rickii Rehm est potius *Microthyrium* (*Microthyriella*) *Rickii* (Rehm) v. Höhn. nuncupandum.

Microphyma Bubakii Rehm est *Melaspilea*, forte *M. populinæ* Rehm var.

Saccardia Durantæ Pat. var. *Rickii* Rehm est potius *Saccardinula Rickii* (Rehm) v. Höhn. dicenda.

Molleriella Epidendri Rehm videtur potius lichen minimus foliicola.

Trichophyma Bunchosiæ Rehm, *Pazschkea lichenoides* Rehm, *Puiggariella apiahyna* Speg. et *Melittosporiopsis violacea* Rehm, sunt, teste cl. von Höhnel, ad Lichenes spectantia.

1. *Myriangium floridanum* (Ell. et Galw.) Rehm. ap. v. Höhnel in 5267
Sitzgb. k. Akad. Wiss. Wien, CXVIII, Abt. I, (Apr. 1909) p. 354,
Southworthia floridana Ell. et Galw. in herb. Ellis. — Stromatibus
solitariis v. crustaceo-aggregatis, globoso-depressis, nigris, vix ni-
tidis, 500-600 μ . diam., carbonaceis, e cellulis 8-10 μ . diam., supra
stratum 30 μ . cr., infra stratum basilare sterile 100 μ . cr. forman-
tibus conflatis; ascis irregulariter stratoze dispositis, ovato-globo-
sis, 36-48 μ . diam., confertis, octosporis, tenui-tunicatis, pariete
cellulari simplici separatis; sporidiis hyalinis, oblongo-clavulatis,
28-32 \times 9-13, sæpius 7-septatis et septo longitudinali unico inter-
rupto partitis, sæpe curvulis, utrinque rotundatis.

Hab. in ramis Citri Aurantii in Florida, Amer. bor.

2. *Myriangium Cinchonæ* Rehm, Ann. Myc. VI (1908) p. 325. — Stro- 5268
matibus e cortice crasso emergentibus, thallo proprio carentibus, gre-
gariis, orbicularibus vel oblongis, planis, haud marginatis, super-
ficie subverruculosis, atris, 0,5-1 mm. diam., intus hyalino-flavidu-
lis, ceraceo-corneis; ascis immersis, late dispersis et parenchymate
cellularum elongatarum magnarum separatis obtectisque, ovalibus,
ca. 100 \approx 50-70, octosporis pariete 10-12 μ . extus lata,; sporidiis
ellipsoideis, utrinque obtusis, interdum subcurvutulis, transverse
11-13-longitudinaliter multoties divisis indeque muriformibus, pri-
mitus hyalinis, demum olivaceis, 50-60 \approx 22-25, irregulariter po-
sitis; parenchymate stromatis versus superficiem olivaceo, epithe-
cium latum formante; hypothecio proprio nullo.

Hab. in cortice venali *Cinchonæ* regiæ in India orientali.

3. *Myriangium curreyoideum* (Theiss.) Sacc. et Trott., *Phymatosphæria* 5269
curreyoidea Theiss., Beih. Botan. Centralbl. Bd. XXVII (1910)
 Abt. II, p. 402. — Stromatibus nigris dothideaceis, primo immer-
 sis rubricosis, dein epidermide fissa erumpentibus brunnescentibus,
 demum superficialibus, sublimeris v. epidermide breviter cinctis, lata
 basi semper innatis, lenticularibus, 250-350 μ . diam. v. oblongo-
 ellipticis, c. 300-600 \times 250, interdum confluentibus, intus brunneo-
 rubris, extus opacis, atris; strato peripherico textura carbonacea
 pseudoloculos globosos v. 4-6-angulatos monascos efformante; ascis
 globosis 24-33 μ . diam. v. ellipsoideis 25-32 \times 20-27, crasse tunicatis,
 astipitatis, aparaphysatis, octosporis; sporidiis ellipsoideis rectis v.
 leniter curvulis, utrinque rotundatis v. inferius angustatis, sub-
 clavatis, conglobatis, hyalinis, dein flavescentibus, demum brun-
 neis, muriformibus, septis transversis plerumque 3 raro 4-5, lon-
 gitudinalibus 1-3, ad septa præsertim medio constrictis (quando
 maturis), 18-22 \times 6-8.

Hab. in ramulis et foliorum nervis *Compositæ* subligno-
 sæ decumbentis, Sao Leopoldo Rio Grande do Sul Brasilæ (Rick).

4. *Myriangium Bambusæ* Rick, *Broteria* V (1906) p. 39. — Stromate 5270
 coriaceo-carbonaceo, effuso, tenui; apotheciis (?) inter se liberis, bre-
 viter stipitatis, applanatis v. etiam calyciformibus, majusculis, ru-
 gosis, atris, carnosio-lentis, 1-3 mm. diam., aggregatis; ascis primi-
 tus sphaericis, humefactis cylindricis et tunc usque ad 160 μ . long.,
 20 μ . latis, membrana tenui, octosporis; sporidiis uni- v. biserialibus
 25-50 \times 12-15, hyalinis muricatis, uno septo constrictis et sic facile
 in duas partes scissis; paraphysibus non visis.

Hab. in ramis siccis *Bambusæ*, Rio Grande do Sul Brasilæ.
 — Habitus exterior *Karschiæ nigerrimæ*. Ob sporidiorum et apo-
 thecii (?) characteres vix *Myriangium*.

MICROPHYMA Speg. — Syll. VIII p. 844.

1. *Microphyma Bubákii* Rehm, in Bubák Beitr. Pilzfl. Ungar. in Nö- 5271
 vénytani Közlemények (1907) Heft 4, Extr. p. 19. — Ascomatibus
 in maculis albis ad lignum gregarie insidentibus, globosis, 150-
 160 μ . lat., brunneis, levibus, excipulo tenui parenchymatico, brun-
 neo omnino tectis, basi hyphis longis, septatis, brunneolis, 4-5 μ .
 cr. cinctis; ascis ovoideis e basi ascomatis inter se subparallelis,
 apice incrassatis, 50-55 \times 15-18, octosporis, pseudoparaphysibus ge-
 latinosis, septatis, 3 μ . cr. cinctis, in parietem excipuli desinenti-

bus; sporidiis distichis, ovoideis, utrinque fortiter rotundatis, medio uniseptatis, loculis 1-2 grosse guttulatis, hyalinis, 12-14 \times 6-7. J. +

Hab. in ligno putri Fraxini Orni, Csernatale prope Herkulesfürdő Hungariæ. — A typo generis differt ascomate seu stromate intus haud distincte loculigero et tunc forte generice distinguì potest (*Microphymella* Rehm).

2. **Microphyma Rickii** Rehm, Broteria V (1906) p. 227. — Stromati- 5272
bus hypophyllis, innatis, orbicularibus, convexulis, extus fusconigris, haud papillatis, tenuissime scabriusculis, dispersis, 0,3-0,7 mm. diam.; ascis per matricem hyalinam parenchymatice contextam separatis, parallele positis, ovoideis, crasse tunicatis, 60-70 \times 30-35, octosporis; sporidiis fusoideis, utrinque subacutatis, rectis v. curvatis, medio septatis, haud constrictis, granulis minutissimis repletis, hyalinis, 30 \times 7-9, parallele positis; epithecio tenui, fuscidulo, parenchymatico; hypothecio hyalino.

Hab. ad folia Xanthoxyli in Brasilia (Rick). — Dubium an fungus plane evolutus? Extremo peridermii folii strato obtectum stroma, modo colore nigro-fusco sine ullo pororum vestigio conspicuum, ascis autem singulatim dispositis non ad *Dothideaceas* pertinere potest.

MYXOTHECA Ferdinands. et Winge, Botanisk Tidsskr. XXX (1910) p. 212 (Etym. *myxa* mucus et *theca* h. e. ascus). — Stroma epiphyllum, superficiale, tenue, membranaceum, structura indistincte pseudoparenchymatica, ambitu substrigosum, læticolor. Asci in stromate singulatim sparsi, subglobosi, longiuscule stipitati, e centro communi, 7-10(-plures) orientes, membrana gelatinoso-deliquestente, ideoque quasi intra locellos mucosos inclusi, nullo autem strato parietino a stromate cingente limitati; sporidia oblonga, curvula, dense tessellato-muriformia, flavida, deliquestentia ascorum et delapsu stromatis liberata. — Genus quoad affinitatem ambiguum, Myriangiaceis, imprimis *Ascomycetellæ*, characteribus nonnullis accedens.

1. **Myxotheca hypocreoides** Ferdinands. et Winge, l. c. p. 212, f. 2. 5273
— Stromatibus in epiphyllis hinc inde sparsis, a mycelio intracellulæ ortis, plaguliformibus, rotundatis, ad 1 mm. diam., vix $\frac{1}{10}$ mm. altis, ex ascis maturis prominulis luteolis, zonula albida sterili substrigosa cinctis, membranaceis, structura tenuiter et indistincte pseudoparenchymatica; ascis in stromate singulatim sparsis, monostichis v. subdistichis, juvenilibus plerumque profundius

immersis, maturis (stratis cingentibus incremento protrusis) parum supra superficiem stromatis prosilientibus, subglobosis, ovoideo-globosis v. citriformibus, 70-80 \approx 50-70 (membrana gelatinosa excepta), deorsum in stipitem circ. 5 μ . cr. (membrana excepta), longitud. bis-pluries diametrum ascorum superantem transeuntibus; stipitibus singulis seu hyphis ascigeris e cento communi 7-10(-pluribus) egredientibus, evanescentibus; membrana ascorum nec non stipitum mature gelatinoso-deliuescente, indistincte limitatis [qua de causa asci singuli intra locellos gelatinosos inclusi et desuper visi circulo hyalino circumscripti videntur]; sporidiis octonis, conglobatis, e dorso cylindraceo-oblongis, medio turgidulis, e latere curvatis, utrinque rotundatis, medio (intus) ventricosus, tenuiter tunicatis, densissime murali-cellulosis (septis transversalibus fere 20, longitudinalibus minus perspicuis, in fronde qualibet plerumque binis), 64-74 \times 18-20, maturis flavidulis, deliuescentia ascorum et delapsu stromatis liberatis.

Hab. ad pinnas languescens *Trichomanes pinnati*, in valle Maravalli dicta insulæ Trinidad (H. LASSEN).

Fam. 2. Saccardiaceæ v. HÖHN.

Sec. von Höhnelt in Sitzb. k. Akad. d. Wiss. Wien, CXVIII, Abt. I, Apr. 1909, pag. 369 hæc nova familiola Discomycetum dignoscitur ascomatibus superficialibus, marginatis; excipulo tenui, celluloso-parenchymatico; ascis globoso-ellipsoideis, paraphysibus articulatis epithecium tenue formantibus; sporidiis hyalinis v. coloratis; subiculo arachnoideo. Ecce genera:

Saccardia Cooke. — Sporidia clathrata, hyalina [*S. quercina* Cooke].

Dictyonella v. Höhn. — Sporidia clathrata, colorata [*D. erisyphoides* (Rehm) v. Höhn. = *Saccardia erisyphoides* Rehm].

Fam. 3. Phillipsiellæ v. HÖHN.

In hac familiola cl. v. Höhn., in Sitz. k. Ak. Wien CXVIII, Abt. I, Apr. 1909, p. 85, colligit genera Discomycetum *Phillipsiella* Cooke et *Protasia* Racib. ad Gymnoascaceas nutantia et digno-

scenda: ascomate perexiguo omnino superficiali, immarginato, ascis unistratosis, ovoideo-globosis, hyphis paraphysiformibus multiversis obvallatis, epithecium interruptum laxum formantibus; excipulo nullo. Huc pertinent:

Phillipsiella Cooke. — Sporidia hyalina, bicellularia; ascoma nudum [*Ph. atra* Cooke, *Ph. Puiggarii* (Speg.) v. Höhn. (= *Microphyma* Speg.); *Ph. graminicola* v. Höhn., *Ph. nigella* Ph. et Harkn.

Protasia Rac. Paras. Alg. und Pilze Javas III, p. 42 (species non indicatæ). —

1. *Phillipsiella graminicola* v. Höhn., Fragm. zur Myk. VI (1909) 5274 p. 85, *Microphyma graminicola* v. Höhn., Ergeb. Bot. Exp. Südbras. 1901, Denk. k. Ak. d. Wiss. Wien Bd. LXXXIII (1907) Extr. p. 33. — Stromatibus nigris opacis, depressis, tenuibus, sparsis, rotundatis v. elongatis, 200-250 μ ., stratu superficiali laxiusculo atro-brunneo; basi contextu plectenchymatico hyalino fertili; ascis unistratosis, globosis vel ovoideis, crasse tunicatis, 16-20 \approx 13-16, octosporis; sporidiis hyalinis v. flavido-viridulis, bilocularibus, elongatis v. subclavulatis, ad septum non constrictis, utrinque rotundatis, loculo super. plerumque parum breviori et latiori, 10-12 \approx 3-4.

Hab. in foliis vivis *Chusqueæ Wettsteinii*, in silvis in districtu urbis Itapeirica, Sao Paulo Brasilæ. — *M. Puiggarii* Speg. habitu simillima sed differt ascis minoribus, sporidiis pallidioribus, characteribus stromatis etc.

Fam. 4. Elsinoaceæ v. HÖHN.

Sec. cl. v. Höhn., Fragm. z. Mykol. VI, p. 98, in Sitzungsber. k. Akad. d. Wiss. CXVIII, Abt. I, Apr. 1909, p. 373, hæc nova familiola Myriangiaceis affinis, dignoscitur ascomatibus matrice innatis, denique, matrice partim destructa, lateraliter liberis, plectenchymate illimitato, carnosulo formati, ascis inordinate immersis. Genera sunt:

Elsinoë Racib. — Sporidia transverse pluriseptata, hyalina [*E. Convallariæ* Rac.].
Myriangina P. Henn. (ut subg. *Myriangii*). — Sporidia clathrata, hyalina [*M. mirabilis* P. Henn.].

Fam. 5. Cookellaceæ v. HÖHN.

In hac familiola nova Discomycetum colligit cl. v. Höhel in Sitzb. k. Akad. d. Wiss. Wien CXVIII, Abt. I, Apr. 1909, p. 354, typos sequentes dignoscendos ascomate disciformi, omnino superficiali, carnosulo-gelatinoso, læte colorato.

A. Asci unistratosi; contextus fibroso-plectenchymaticus inter et supra ascos parum evolutus.

α Contextus inter et supra ascos sæpius omnino obsoletus.

Ascosorus P. H. et R. — Asci clavati; sporidia transverse septata, hyalina [A. *floridanus* (E. et M.) P. Henn. et R.].

β Contextus inter et supra ascos magis evolutus.

Leptophyma Sacc. — Asci breviores; sporidia bicellularia, hyalina [*L. aurantiacum* (E. et M.) Sacc.].

B. Asci pluristratosi; contextus inter et supra ascos copiose evolutus.

Cookella Sacc. — Sporidia clathrata, colorata; contextus fibroso-plectenchymaticus [*Cookella microscopica* Sacc.].

Ascomycetella Ellis ex p. — Sporidia clathrata, hyalina; contextus sub asois minute celluloso-parenchymaticus, inter et supra ascos plus minus fibroso-plectenchymaticus [*A. sulphurea* (Wint.) Sacc.].

ASCOMYCETELLA Ellis — Syll. VIII p. 846, XIV p. 826, XVIII p. 116.

1. *Ascomycetella sulphurea* Wint. — Syll. VIII, pag. 846. — Huc 5275 videtur spectare *Myriangium flavum* (Wint.) P. Henn. in Hedw. XL (1901) p. 354, fig. 3, nam sub nomine *Asc. flavæ* Wint. nulla species extare videtur et nomen forte ex lapsu calami cl. Henningsii originem duxit.

COOKELLA Sacc. — Syll. I p. 71, VIII p. 846, XVI p. 802, 1152.

1. *Cookella paulistana* Speg., Fungi Paulist., Rev. Mus. La Plata 5276 t. XV, p. 31 (1908). — Subiculo et maculis nullis; stromatibus lenticularibus atris, glabris, amphigenis, superficialibus, 150-200 μ. diam. coriaccellis, intus pulposo-albidis; ascis pulpa immersis, numerosis subpiriformibus 40 × 30 antice obtusis crasseque tunicatis postice umbonatis; sporidiis conglobatis utrinque obtusis, 18-20 × 9-10, tri-

septatis ad septum medium constrictis, hyalinis; in iisdem stromatibus: loculis pusillis, $50 \approx 30$, penicillum sporophorum filiformium, $30 \approx 1$, hyalinorum gerentibus cum sporulis ellipsoideis continuis utrinque acutiusculis $4-5 \approx 1,5$ chlorinulis farctis.

Hab. ad folia viva Bignoniaceæ cujusdam in dumetis Ipiranga até Cambucy, Brasilia (USTERI).

Fam. 6. Agyriaceæ v. HÖHN.

Teste cl. v. Höhn. in Sitzung. k. Akad. d. Wiss. Wien CXVIII, Abt. I, Apr. 1909, p. 362 et 1230, hæc familiola Discomycetum dignoscitur ascomatibus excipulo carentibus, superficialibus, convexis, basi applanatis, carnosogelatinosis, hypothecio plerumque atro minute celluloso, valde evoluto; ascis clavatis v. ovoideis, sæpe radiatim dispositis, paraphysibus apice grumosis epithecium coloratum formantibus. Ecce genera sec. v. Höhnel:

Agyrium Fr. — Sporidia 1-cellularia.

Henningsiella Rehm. — Sporidia bicellularia. Paraphyses nullæ. Hic spectant: *Ascomycetella quitensis* Pat., *Asterina Ilıcis* Ell.

Lecideopsella v. Höhn. — Sporidia bicellularia. Paraphyses gelatinosæ, reticulatæ. Huc spectat *Lec. gelatinosa* v. Höhn.

Agyronella v. Höhn. — Sporidia bicellularia. Paraphyses apice vesiculoso-incrassatæ, brunneæ. — Huc spectat *Microthyrium Lagunculariæ* Wint.

Mollerella Wint. — Sporidia pluriseptata. Huc spectant *M. mirabilis* Wint. et *M. Lirih* Zimm.

Agyrona v. Höhn. n. gen. — Sporidia clathrata. Huc spectant *Phymatosphaeria Calami* Rao., *Ascomycetella punctoidea* Rehm, *Saccardia atroviridula* Rehm, *Saccardia Durantæ* Pat. et Lag.

Agyriopsis Sacc. et Syd. — Sporidia filiformia. Huc spectant *A. Betheli* (E. et Ev.) Sacc. et Syd.

AGYRIUM Fr. — Syll. VIII p. 634, X p. 40, XVI p. 768, XVIII p. 140.

1. *Agyrium chilense* Speg., Fungi Chilenses (1910) p. 128, cum icon. 5277
— Euagyrium; ascomatibus laxè gregariis, primo epidermide tectis dein erumpentibus, pusillis, lenticularibus, succineis, glabris, 100-120 μ . diam.; ascis subclavulatis, deorsum attenuato-pedicellatis, $40-50 \approx 4-5$, octosporis; paraphysibus filiformibus apice non v. vix incrassatulis cinctis; sporidiis distichis subcylindræcis, utrin-

que obtusiusculis atque minute 1-guttulatis, continuis, hyalinis, parvis, $10-11 \approx 2,2-5$.

Hab. in pedunculis siccis subputrescentibus Lobeliæ Tupæ prope Ciudad de Valdivia Chile, Amer. austr. — Habitus nectrioides et *Orbiliam* in mentem revocans.

2. *Agyrium rhizomatum* (Nitschke in sched.) Rehm, Ann. Mycol. IV 5278 (1907) p. 535, *Stictis rhizomatum* Nke. (Herb. Fuckel in Herbar Barbey-Boissier). — Stromatibus gregariis, sessilibus, punctiformibus vel elongatis, minutissimis, $0,1-0,12$ mm., fuscidulo-rosaceis, haud marginatis, excipulo carentibus, hymenio in strato cellularum hyalinarum nidulante; ascis cylindraceo-clavatis, apice rotundatis et incrassatis, $120-150 \approx 10$, octosporis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, hyalinis, $12-15 \approx 4$, transverse mono- v. distichis; paraphysibus filiformibus, 2μ ., ad apicem $2,5 \mu$. cr., hyalinis; hymenio in toto dilute rosaceo.

Hab. ad rhizomata in Germania? (NITSCHKE). — Species quoad locum systematicum dubia.

3. *Agyrium chartarum* Peyl, Beschreib. einzig. neuer Pilze in Lotos 5279 VIII (1858) p. 31, t. I, f. 19. — Ascomatibus sessilibus v. brevissime stipitatis, initio globosis denique depressis dein disco collabescentibus, roseis dein flavo-roseis, minutissimis, excipulo nullo v. indistincto; ascis tereti-clavatis, fasciculatis, paraphysatis, octosporis; sporidiis monostichis, globosis, hyalinis, levibus.

Hab. in charta putri in calidariis, temp. 18° R. in Bohemia.

AGYRIOPSIS Sacc. et Syd. — Syll. XIV p. 805, XVI p. 775.

1. *Agyriopsis javanica* v. Höhn. Fragm. z. Myk. VIII (1909) in Stzb. 5280 k. Ak. d. Wiss. Wien, CXVIII, Abt. I, p. 1227. — Ascomatibus molli-carnosis, omnino superficialibus, regulariter sparsis, irregulariter rotundatis, late insidentibus, discoideis, usque ad 300μ . latis et 70μ . cr., siccis flavo-brunneis et minute farinaceis, udis magis flavescentibus, subiculo et excipulo destitutis; hypothecio $15-20 \mu$. cr., pallido indistincte minute celluloso plectenchymatico; ascis copiosis, clavatis supra rotundatis v. vix conoideo-angustatis, crassiuscule tunicatis, basi breviter incrassato-pedicellatis, $44-75 \approx 7,5-8$ (plerumque $60 \approx 8$), octosporis; sporidiis tristichis v. tetrastichis, parallelis, hyalinis, supra rotundatis et clavatis usque ad 3μ . incrassatis, basi sensim attenuatis acutiusculis, sexocularibus, in articulos facile secedentibus, $28-33 \approx 3$; paraphysibus filiformi-

bus, 1 μ . cr., supra ramulosis ascos non superantibus; epithecio e velo tenui flavo-brunneo minute granuloso-farinoso constituto. J—.

Hab. in pagina inferiore foliorum viventium *Paratropiæ* sp. in silvis prope Tjibodas in ins. Java.

LECIDEOPSELLA v. Höhn. *Fragm. Myk. z. VIII* (1909) in Sitzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, p. 1229 (Etym. dim. a *Lecideopsis*, cui affinis). — Follicola; ascomata depresso adnata, superficialia, excipulo destituta, tenuia gelatinosa, pallide colorata; asci ovoidei, octospori; sporidia hyalina v. subhyalina, bilocularia; paraphyses gelatinosæ, reticulato-ramosæ, epithecium tenue, pallidum, membranaceum efformantes; hypothecium tenuissimum. J—.

1. *Lecideopsella gelatinosa* v. Höhn., l. c. p. 1230. — Ascomatibus 5281 hypophyllis, sparsis, superficialibus, omnino adnatis, 400–1000 μ . latis, 40 μ . circ. cr. ad marginem tenuioribus, gelatinosis, griseo-brunneolis; ascis laxiusculis globoso-ovoideis, basi breviter noduloso-stipitatis, octosporis, 32–35 \times 28; paraphysibus tenuissimis, hyalinis; sporidiis parallelis, ovoideo-elongatis, utrinque rotundatis, bilocularibus, loculo superiori breviori et latiori, flavidis, 16 \times 7; hypothecio pallido, minute celluloso plectenchymatico.

Hab. in pagina inferiori foliorum *Paratropiæ* sp. in silvis Tjibodas in ins. Java.

AGYRONELLA v. Höhn., *Fragm. z. Mykol. VIII* (1909) Sitzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I, pag. 1229 (Etym. *Agyrium*, cui affinis). — A *Lecideopsella* von Höhn. differt præcipue paraphysibus plerumque brunneolis, apice fortiter vesiculoso-incrassatis et epithecium celluloseum efformantibus, hypothecio modice incrassato, obscuro.

1. *Agyronella Lagunculariæ* (Wint.) v. Höhn. l. c. p. 1230, *Micro-* 5282 *thyrium Lagunculariæ* Wint. — Syll. IX, p. 1058.

HENNINGSIELLA Rehm — Syll. XIV p. 32.

1. *Henningsiella Fairmani* Rehm, *Ann. Mycol. VII* (1909) p. 534. — 5283 Ascomatibus excipulo carentibus, sessilibus, gregariis, orbicularibus, planis dein convexulis, nudo oculo vix visibilibus, 0,1 mm. diam., glabris, albidulis v. cinereis, siccis subochraceis, subgelatinosis; hypothecio hyalino, parenchymatico; ascis saccatis, apice rotundatis, haud incrassatis, c. 60–80 \times 10–15, 8-sporis; jodi ope nulla; sporidiis oblongis v. subclavatis, utrinque rotundatis, rectis, 1-cel-

lularibus, gutta magna centrali instructis, dein medio septatis, haud constrictis, hyalinis, 10-15 \times 4-6, 1-2-stichis; paraphysibus filiformibus conglutinatiss, epithecium dilute flavidulum formantibus.

Hab. in ligno putrido in silvis, Lyndonville New York Amer. bor. (FAIRMAN).

Fam. 7. Onygenaceæ FR.

DENDROSPHÆRA Pat., Bull. Soc. Myc. France XXIII (1907) p. 69 (Etym. *dendron* arbor et *sphæra*). — Humicola; ascoma stipitatum, sursum ramosum apicibus capitato-globulosis, primum floccosum dein denudatum; gleba ceracea dein pulveracea. Asci rotundati v. ovoidei, octospori, evanidi; sporidia simplicia, sphæroidea, fere hyalina. — Gen. *Onygenæ* et *Trichocomæ* proximum.

1. **Dendrosphæra Eberhardti** Pat., l. c. p. 69. — Stromate stipitiformi 5234 erecto radicato, infra simplici cylindraceo, levi v. sulcato-rugoso 10-15 \times 3-6 mm. non carbonaceo, brunneo-rubro basi obscuriore, hyphis confertis gracilibus (3 μ . cr.) flavidis, septatis constituto, supra ramoso, ramis plus minusve elongatis, apice subgloboso-incrassatis, 2-6 mm., primum albis dein flavo-auratis, intus plurilocularibus; ascis globosis v. ovoideis, 30-50 \times 20-27 raro uno latere attenuatis, octosporis; sporidiis sphæroideis 8-10 μ . diam., grosse uniguttulatis, primum levibus demum ob incrustationes asperulis v. irregulariter echinulatis.

Hab. ad terram in silva Djirin, alt. 1600 m. Indo-China (EBERHARDT).

Fam. 8. Elaphomycetaceæ TUL.

ELAPHOMYCES Nees — Syll. VIII p. 863, X p. 80, XI p. 441.

1. **Elaphomyces virgatosporus** Hollós, Ann. Mus. Nat. Hung. VI (1908) 5235 p. 318. — Globosus v. compressus, sulcatus v. excavatus, magnitudine nucis avellanæ v. juglandis, mycelio umbrino instructus; velo papillis obtusis vel spinulis truncatis crassis sparso et inæqualiter tecto, asper, carbonaceus, obsoletus, durus, fragilis, senescendo rimosus; cortice albido, albo-griseo, velum æquante v. cras-

siore, mox evanido; gleba umbrina; sporidiis globosis, levibus v. asperatis, subtiliter et dense virgatis, brunneis, demum opacis, 16-22 μ ., plerumque 20 μ . diam.

Hab. in fagetis et carpinetis ad Litke Hungariæ.

2. *Elaphomyces plumbeus* Hesse Hypog. II, p. 69, t. 16, fig. 15-18, 5286 t. 21, fig. 53, t. 22, fig. 6. — Ascomate 0,5-1,5 cm. diam., plerumque piriformi; cortice exteriori plumbeo, levi, cortice interiore sordide griseo; gleba (maturitatis tempore) intense brunnea; ascis globosis 4-8-sporis; sporidiis globosis, levibus, flavo-virescentibus, 18-20 μ . diam.; odore fungi ingrato, mucescente.

Hab. ad terram humosam inter Quercus et Fagos in provincia Hessen-Nassau Germaniæ.

3. *Elaphomyces uliginosus* Hesse Hypog. II, p. 67, tab. 22, fig. 8, 5287 28, 30. — Ascomate 2-2,5 cm. diam., strato exteriori intense rubro-brunneo, denique fere nigro, levi, mycelio floccoso griseo-viriente involuto; strato interiore spongioso, initio candido, dein griseo; gleba primo albo-floccosa, dein grisea, denique brunneo-variegata tandemque nigricante; ascis breviter pedicellatis, globoso-ovoides; sporidiis globosis, hyalinis dein flavido-griseis, denique saturate rubro-brunneis, 16-18 μ . diam., levibus.

Hab. ad terram silvaticam inter Fagos in provincia Hessen-Nassau Germaniæ.

Fam. 9. Tuberaceæ

GENEA Vitt. — Syll. VIII p. 873.

1. *Genea vagans* Mattir., Elenco Fung. hypog. Vallombr. p. 1 extr. 5288 (Malp. 1900), Bucholtz in Ann. Mycol. I (1903) pag. 169, t. IV, f. 16-18. — Ut plurimum Pisi magnitudine, carbonaceo-atra, glabra, ostiolata, globosa v. irregularis, in utraque facie verrucosa, coma radiciformi mediocri prædita; cavitate interiori simplici v. irregulariter lacunosa; ascis generis, cylindraceis, octosporis; sporidiis ellipsoideis, $31 \approx 23$ (sine verrucis), verrucis conicis conspicuis, $5,8 \approx 4,3$, tectis, hyalinis.

Hab. in silva Vallumbrosa Etruriæ sub Abietibus et Fagis (MATTIROLO) in agro Tridentino (BRESADOLA) et sub Populis, Tiliis, Quercubus et Ulmis pr. Mosca Rossicæ. — A *Genea*

hispidula forma sporidiorum ascomatisque glabritie et colore dignoscitur. Odor debilis nec peculiaris.

2. *Genea Thwaitesii* (B. et Br.) Petch, Ann. Mycol. V (1907) p. 475. 5289
— Ita vocanda *Hydnocystis Thwaitesii* B. et Br. — Syll. VIII, p. 877.

MYRMECOCYSTIS Harkn. — Syll. XVI p. 809.

1. *Myrmecocystis cerebriformis* Harkn. — Syll. XVI, p. 809 — Ed. 5290
Fischer, Botan. Ztg. (1908) p. 145, tab. VI, fig. 1-3; *Pseudogenea californica* Ed. Fischer, Ber. deutsch. bot. Ges. XXV (1907) pag. 372, Fedde Repertorium VII (1909) p. 193. — Irregularis, gibbosus et sulcatus, basi distincta destitutus, lacuna lobata et sinuosa, nonnullis locis ad fungi superficiem aperta instructus; diam. ad 1 cm.; superficie et lacunæ parietibus cortice pseudoparenchymatico, minute verrucoso, cremeo-albo obductis; hymeniis disjunctis arcuatis, in interiorem fungi lacunam spectantibus; paraphysibus septatis, fasciculatim ascis immixtis, sursum in corticem lacunæ interioris transeuntibus; ascis cylindraceo-clavatis, 180-220 \times 35; sporidiis sphaericis, diam. 28-35 μ ., episporio crasso, flavescenti, imperfecte et irregulariter verrucoso v. reticulato instructis (diagn. sec. FISCHER).

Hab. plane subterranea in arenosis Californiæ. — A *Myrmec. Vallisumbrosæ* (Bucholtz) Ed. Fischer (syn. *Pseudogenea* Buch.) differt forma irregulari, hymeniis distinctius disjunctis et arcuatis, sporidiis majoribus.

PSEUDOBALSAMIA Ed. Fischer, Botan. Zeitg. (1908) p. 154; Fedde Repertorium VII (1909) p. 194 (Etym. *pseudes* falsus et *Balsamia*). — Fungus basi distincta destitutus, cortice pseudoparenchymatico obductus; venæ externæ tomento repletæ v. apicem versus convergentes v. irregulariter dispositæ nonnullisque locis ad fungi superficiem apertæ; asci octospori, elliptico-rotundati, per totam fungi carnem inordinate inspersi; sporidia ellipsoidea in asco varie (non seriatim) disposita, hyalina, levia.

1. *Pseudobalsamia Setchellii* E. Fisch., l. c. tab. VI, fig. 13-13; Fedde 5291
Repertorium VII (1909) p. 194. — Fungus plus minusve regularis, diam. ad 1,5 cm., habitu *Balsamiæ fragiformi* persimilis; corticis superficie fulvo-badia, verrucis creberrimis stipatis pyramidatis et nonnumquam subsulcatis asperata; ascis elliptico-rotundatis 50-70 \times 25-35; sporidiis hyalinis, levibus, 21-28 \times 10-12.

Hab. in terra sub Pinu radiata, Berkeley Californiæ (N. L. GARDNER).

TUBER Mich. — Syll. VIII p. 882, X p. 81, XI p. 443, XVI p. 813, XVIII p. 206.

1. **Tuber puberulum** B. et Br. — Syll. VIII, p. 893 — var. *longi-* 5292
sporum Bucholtz, Bull. Soc. Imper. Mat. Moscou (1907) n. 4,
p. 453. — Strato peridiali interno hinc inde ex hyphis extrorsum
versis intricatis conflato; sporidiis longioribus.

Hab. ad terram, Krjukowo prope Nikolaibahn, Rossia.

2. **Tuber michailowskjanum** Bucholtz, Bull. Soc. Imper. Nat. Moscou 5293
(1907) n. 4, pag. 457. Ita vocandum *Tuber puberulum* B. et Br.
var. *michailowskjanum* Buch. — Syll. XVIII, pag. 206. — Sec.
cl. Bucholtz in l. c. pag. 459 hæ varietates distinguendæ sunt:
a. microreticulatum Buch. l. c., areolato sporarum minuta; areolæ
trans lucem non minus quam 4-5 visibiles. — Ad terram Senj-
kino et Krjukowo, Moskau Rossia. — *b. medioreticulatum* Buch.,
l. c.: areolatio sporarum magnitudine media; areolæ trans lucem
3-4. — In silvis Gratschewniki, Pljeskowo, Krasnaja Pachra, Se-
njkino etc. Rossia. — *c. macroreticulatum* Buch., l. c. pag. 460,
Syn. *T. ferrugineum* Vitt. var. *balsamoides* Buch., Syll. XVIII,
p. 207: areolatio sporarum conspicua; areolæ trans lucem 2, raro
ultra, visibiles. — In Rossia compluribus locis.
3. **Tuber sinuosum** Lázaro é Ibiza, Rev. Ac. de Ciencias Exact. Fis. 5294
y. Nat. Madrid (1908) Extr. pag. 15, tab. I, fig. 9-12, tab. III,
fig. 32-34. — Ascomatibus subglobosis sed variabilibus, irregula-
riter mamillatis, duris, sulcatis, 4-7 cm. latis; superficie inæquali
sed levi, opaca, papillis v. reticulis destituta, colore etiam variabili
ex subochraceo rubescente; carne alba venis tenuibus undulatis
griseis prædita; ascis subovoideis v. piriformibus, irregularibus, 7-
v. 8-sporis; sporidiis sphæroideis breviter echinulatis.

Hab. ad terram, Villanueva del Fresno prope Badajoz Hispa-
nia. — Edule; sapore ed odore forti grato.

4. **Tuber lutescens** Lázaro é Ibiza, Rev. Ac. de Ciencias Exact. Fis. 5295
y Nat. Madrid (1908) Extr. p. 13, tab. I, fig. 5-8, tab. III, f. 29-
31. — Ascomate tuberoso subgloboso, irregulari, 3-5 cm. lato, su-
perficie undulata v. submamillata, hinc inde subsulcata, levi, ro-
seo-ochracea; carne alba et primum amorphæ dein venis griseis
undulatis divisa, cortice tenui 0,25-0,50 mm. cr.; ascis ellipsoideis

irregularibus, tenuissime tunicatis, plerumque octosporis; sporidiis sphaeroideis, echinatis.

Hab. in Hispania plerumque centrali compluribus locis. — E-
dule; odore et sapore tenui; a *T. rufo* et *nitido* diversum.

5. **Tuber pallidum** Lázaro é Ibiza, Rev. Ac. de Ciencias Exact. Fis. 5296
y Nat. Madrid (1908) Extr. p. 10, tab. I, fig. 1-4, tab. III, f. 23-
28. — Ascomate tuberiformi, transverse subellipsoideo, 2-3 cm.
alto, 2-4 cm. lato, sæpe irregulari v. asymmetrico; superficie pal-
lide ex alutaceo brunnea levi, subæquali; carne primum alba dein
grisea; ascis ovoideis, irregularibus, plerumque octosporis; spori-
diis sphaeroideis, griseolis, echinulatis, spinulis acutis laxiusculis
longis.

Hab. in Hispaniæ, imprimis centr. et septentrionalis complu-
ribus locis. — Edule; verisimiliter parasiticum *Helianthem* (*Tu-
berariæ*) variabilis.

6. **Tuber Lyoni** Butters, Botan. Gaz. XXXV (1903) pag. 431, cum 5297
icon. — Ascomatibus globosis v. irregulariter ellipticis, 0,5-2 cm.
diam., uno latere longitudinaliter excavatis, glabris, læte castaneis,
demum minute areolatis et nigris, peridio subtenui, cartilagineo;
gleba violaceo-brunnea, carnosa sed granulosa; septis peridii nu-
merosis anastomosantibus, labyrinthiformibus, translucidis; venis
externis albis, conspicuis, extus secus sulcos apertis; ascis pedicel-
latis, 1-5- plerumque 4-sporis; sporidiis ellipsoideis, acute echinu-
latis, 25-48 × 15-31.

Hab. sub Tiliis prope Minneapolis Minn. Amer. bor.

7. **Tuber rapæodorum** Tul. — Syll. VIII, p. 890 — var. *Klotzschii* 5298
P. Henn., Kryptog. Fl. v. Brandenb. (1905) p. 156, p. 159, f. III.
— Ascomate subgloboso-nodoso, plicato-foveolato, 0,5-1,5 cm. d.;
ascis ovoideis v. late clavatis, sæpe petiolatis, 65-90 × 45-65, 2-4-
sporibus; sporidiis ellipsoideis, 25-38 × 20-25; membrana brunnea, re-
ticulata.

Hab. ad terram humosam sub Æsculo Hippocastano,
Schöneberg prope Berolinum Germaniæ (KLOTZSCH).

8. **Tuber argentinum** Speg. — Syll. VIII, p. 893 — var. *Andarum* 5299
Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) pag. 423. —
— Ascomate plus minusve profunde delitescenti, 5-15 cm. prof.,
candido sed tacto mox sordide rufescenti, odore saporeque fungino
(non alliaceo) dulci sat intenso ac grato donato.

Hab. abunde in dunis inter radices *Discariæ* longissimæ
prope Adolfo Alsina, Pampa Centrali, Argentina America austr.

HYDNOLITES Tul. — Syll. VIII p. 879.

1. *Hydnobolites javanicus* v. Höhnelt, Sitzb. k. Ak. d. Wiss. Wien 5300 CXVII (1908) Abt. I, p. 1020. — Hypogæus, irregulariter tuberosus, depresso verrucoso-pustulatus, extus flavidus, intus pallidior, 13 mm. latus, 10 mm. altus, opacus, subvelutinus; carne molli, venis sterilibus nullis, ex hyphis hyalinis, 10-12 μ . latis, regulariter tenuiterque tunicatis constituta; ascis numerosis, arcte gregariis, elongato-clavatis, 120 \times 60, 1-3-sporis; sporidiis globosis, pallide griseo-brunneolis, 26-32 μ . diam., tunica duplici 1,5-2, μ . cr., aculeis 4 μ . long.; peridio tenui parum dissimili, ex hyphis flavidis, crebre septatis apice subclavatis, usque ad 16 μ . lat. constituto.

Hab. ad terram in silva primæva Tjibodas in ins. Java.

2. *Hydnobolites californicus* Ed. Fischer, Fedde Repertorium VII 5301 (1909) p. 194. — Tuberosus, plus minusve gibberosus, poris rimisque apertus, basi distincta destitutus; superficie pseudoparenchymatica, primum albida, demum subfuliginea; gleba interna albida v. griseo-albida, canaliculis labyrinthicis ad superficiem fungi hiantibus pertusa; ascis per totam fungi carnem inordinate inspersis, ellipsoideis c. 80-100 \times 50-70; sporidiis globosis, 14-17 μ . cr.; episorio flavescenti reticulo instructo, angulis in aculeos 2-3 μ . long. protractis.

Hab. ad terram in California America bor.

TERFEZIA Tul. — Syll. VIII p. 902, XI p. 445, XIV p. 826, XVI p. 812, XVIII p. 205.

1. *Terfezia hispanica* Lázaro é Ibiza, Rev. Ac. de Ciencias Exact. 5302 Fis. y Nat. Madrid (1908) Extr. p. 17, tab. II, fig. 13-22, t. IV, fig. 35-39. — Ascomatibus tuberiformibus forma et magnitudine variabilibus, subglobosis, subellipsoideis v. subcordatis, basi sæpe in pedicellum crassum usque ad 2 cm. long. productis, a 2,5 usque ad 10 cm. lat., superficie rubro-ochraceo-brunnea, hinc inde pallescenti, opaca, cortice parum distincto; carne roseola rubro-maculata; ascis ellipsoideis irregularibus, pressione subpolygoniis.

Hab. in Hispania fere tota et verisimiliter etiam in Lusitania. — Edulis; odore et sapore caracteristico nullo. — A *T. Leonis* et *T. rosea* Torr. distincta. — Var. *turbinata* Lázaro é Ibiza, l. c, p. 21. — A typo differt basi cuneata v. etiam subpedicellata. — Cum typo in Hispania.

2. *Terfezia Metaxasi* Chat. La Truffe p. 78. t. XIII, f. 2. — Asco- 5303

matibus globoso-depressis, basi breviter et obtuse acutatis, levibus, e griseo flavidis, gleba homogenea, flavicante; ascis globosis, ple-
rumque 6-sporis (numquam 8-sporis); sporidiis 30-32 μ . diam.,
sordide flavidis, spinulis seu verrucis cylindraceis apice truncatis
dense tectis, intermixtis tenuioribus.

Hab. in arenosis, Bagdad in Mesopotamia forte ad Cistos
(METAXAS). — Vulgo *Kamé* (niger).

3. *Terfezia Boudieri* Chat. — Syll. XI, p. 445 — var. *Auzepii* Chat. 5304
Bull. Soc. Bot. Fr. (1893) p. 303. — A typo imprimis dignosci-
tur sporidiorum verrucis depressis sed multo latioribus, qua nota
congruit cum var. *arabica Terfezie Boudieri*, quæ vero sporidiis
gaudet majoribus (26-30 μ . diam.) nec tantum 20-25 ut in typo et
in var. *Auzepii*.

Hab. ad terram peope Chonca in Caucaso (AUZEPI). — Vulgo
Touboulane.

4. *Terfezia Pinoyi* R. Maire, Not. myc., Ann. Myc. vol. IV (1906) 5305
p. 332 et Bull. Soc. Myc. Fr. LIV (1907) p. CXCIV. — Asco-
mate subgloboso vel complanato, stipite nullo vel subnullo, extus
ex albido sordide lutescente; pellicula tenui, levi, sæpius tessella-
to-rimosa; gleba alba, venis concoloribus raris; ascis ovoideis, o-
ctosporis, stipite longiusculo, rarius subnullo præditi, 80-140 (ped.
incl.) \times 52-70; pedicello 5-65 \times 8-12; sporidiis globosis, hyalinis,
episporio tenui, subtilissime verruculoso vel reticulato, rugoso, 16-
19 μ . diam., grosse guttulatis.

Hab. ad radices *Plumbaginis albicantis* in argilloso-sa-
bulosis Sidi-Khalifa pr. Kreider Algeriæ. — Habitus glebæ fere
Tirmanicæ sed sporidia globosa et basis sterilis nulla.

5. *Terfezia Defflersii* Patouill., Journ. de Bot. VIII (1894) p. 154. — 5306
Nigra quandoque rubescens; cute crassa, 1-1,5 mm.; carne rubra
albo-venata; sporidiis sphaeroideis, hyalinis, 20-25 μ . diam., verrucis
latis truncatis nonnullis minoribus immixtis.

Hab. ad terram prope *Helianthemum Lipsii*, El A-
rysch Tunisia (DEFLERS). — *T. Metaxasi* affinis sed differt cute
crassiori et sporis minoribus; a *T. Leonis* colore et magnitudine.

6. *Terfezia rosea* (Tul.) Torrend in Bull. Soc. port. Sc. nat. I (1908) 5307
pag. 180. Sub hoc genere adnumeranda esset *Delastria rosea* Tul.
— Syll. VIII, p. 905 — teste cl. Torrend l. c.

DELASTREOPSIS Mattiolo, Bol. Soc. Brot. XXI (1905) p. 10 [extr.]
(Etym. *Delastrea*, cui affinis). — Peridium pseudo-parenchymati-

cum. Asci oblongi, pedicellati, parietibus crassis præditi, 1-3 raro 4 sporidia foveantes. Sporidia areolato-reticulata muricata. Characteribus variis tam ad *Delastriam* quam ad *Terfeziam* et *Tuber* nutat.

1. *Delastreopsis oligosperma* (Tul.) Matt. Bol. Soc. Brot. XXI (1905) 5308 p. 10. Ita vocanda est *Terfezia oligosperma* Tul. — Syll. VIII, p. 904.

Fam. 10. Endogonaceæ

SPHÆROCREAS Sacc. et Ellis, *Michelia* II, p. 582. Cfr. Syll. IV, p. 648 (non = *Stigmatella*, teste v. Höhnel). Ad hoc genus referendæ sunt species sequentes sec. cl. v. Höhn. in Sitzungsber. d. k. Akad. d. Wissensch. Wien, CXVIII. Abt. I, Apr. 1909, p. 401: **Sphærocreas pubescens** Sacc. et Ell.; **Sph. Dussi** (Pat.) v. Höhn. (*Ackermannia Dussi* Pat.); **Sph. coccogenum** (Pat.) v. Höhn. (*Ackermannia coccogena* Pat.); et sequens **Sph. javanicum** v. Höhn.

1. **Sphærocreas javanicum** v. Höhnel, Sitzb. k. Ak. d. Wiss. Wien 5309 Bd. CXVII (1908) Abt. I, p. 104, fig. 1. — Ascomatibus globosis, duriusculis, opacis, e sordide flavis griseo-viridibus, 500-600 μ . d., apice verruca conica 150-200 μ . lata et alta auctis, sæpe vertice iterum corpusculo sphæroideo addito; contextu hyphenchymatico ex hyphis 4-8 μ . cr., septatis, hinc inde laxiusculis constituto, peripherice in ascos ex ovoideo elongatos 60-90 \times 20-50 inflatis; ascis nonnullis minute granuloso-farctis; sporidiis genuinis non visis.

Hab. ad terram inter ligna ramulosque putrescentes, in Horto bot. Buitenzorg in ins. Java.

Dubiæ sedis.

BYSSOCHLAMYS Westl. in Svensk Bol. Tidskrift II, 2 (1909) p. 134 (Etym. *byssus* et *chlamys* pro chlamydospora). — Mycelium floccosum niveum, repens, hyphis plurinucleatis. Ascoma nullum. Asci nudi, subsessiles, conglomerati, octospori. Chlamydosporæ in apice hypharum tantum formatæ. Conidia catenata (fere *Oosporæ*) conidiophoris brevibus plerumque simplicibus. — Genus inter Endogonaceas et Gymnoascaceas fere medium.

1. **Byssochlamys nivea** Westl., l. c. tab. 4. — Hyphis septatis, ra- 5310

mosis tenuibus, hyalinis 2-5 μ . cr., levibus, sinuosis; ascis subglobo-ovoideis, 6-16 \times 5-12; sporidiis ovoideis, levibus, 3,5-5 \times 3-4; chlamydosporis piriformibus, 5-12 \times 4-10, tunica crassa, levi, primo hyalina, dein subfusca; conidiis levibus, ovoideis, 3-7 \times 3-6,5.

Hab. in peridio *Geasteris coronati* et in nonnullis herbis spiritu conservatis et deinde lente exsiccatis in Suecia.

Fam. 11. Helvellaceæ

Subfam. 1. Morchelleæ.

Sect. 1. Hyalosporæ.

MORCHELLA Dill. — Syll. VIII p. 8, X p. 1, XI p. 391, XIV p. 738, XVI p. 695, XVIII p. 2.

1. *Morchella patagonica* Speg. Myc. Argent. IV, An. Mus. Nac. Buenos Aires t. XIX (1909) p. 442. — Ascomatibus ovoideis dense grosseque costato-reticulatis, isabellinis, intus vacuis, abrupte pedicello albescente 10-15 mm. alto, 5-6 mm. cr., levi, fistuloso impositis, 15-20 mm. long., 10-15 mm. cr., costis numerosis gyroso-reticulatis sat elevatis; ascis clavatis, apice rotundatis 140-150 \times 20, aparaphysatis; sporidiis ellipsoideis, octonis, 15-17 \times 10-11, minute 2-guttatis, levibus, hyalinis, in asci parte sup. oblique distichis v. subconglobatis. 5811

Hab. ad terram muscosam, inter folia delapsa, Puerto Blest, Nahuel-Huapi, Argentina. — Jodi ope ascorum tunica tota cærulescit.

2. *Morchella costata* (Ventenat) Pers., Myc. Europ. I, p. 208, Bres., Fungi Trid. II, p. 42, t. 148, Vittadini, Funghi t. XIII, f. VI-VII, *Phallus costatus* Vent., Diss. Phall. p. 510 (1798). — Ascomate obovato-conico v. pyramidato, apice obtuso, sæpe quadrangulär-compresso, basi adnato, glabro, intus cavo alboque tomentoso, saturate olivaceo v. olivaceo-fuligineo, 7-12 cm. longo, 4-5,5 cm. lato, costis longitudinalibus elevatis, puberulis, raro anastomosantibus, sed rugis transversalibus junctis et areolas rhombeo-difformes efformantibus, saturatius coloratis; stipite cavo, albo, fragili, furfuraceo-floccoso, rugoso, basi bulboso-lacunoso, 4-5 cm. longo, apice 1-1,5 cm., basi 2-3 cm. crasso; carne alba, odore et sapore 5812

gratis; ascis cylindraceis, basi flexuoso-stipitatis, jodo non v. leviter obturaculo cæruleo-tinctis; paraphysibus septatis, ramosis apice clavato et 8-10 μ . cr.; sporidiis ellipsoideis, hyalinis, 18-22 \times 12, membrana interna aurea.

Hab. in hortis Trento, alibique in Italia et Gallia.

3. *Morchella esculenta* (L.) Pers. — Syll. VIII, p. 8 — var. *lutescens* 5313 (Leuba) Sacc. et Trott., *M. lutescens* Leuba, Champ. comest. p. 89, tab. 44, fig. 1-4. — Solitaria; ascomate ovato-oblongo subconico, membranaceo, subcartilagineo, fragili, superne callose reticulato, luteo, intus cavo, subtus clauso; stipite curto, crasso, fistuloso, albidus, basi crassiore, nudo; carne fragili, sapore grato.

Hab. ad terram campestrem, in vineis, vallibus in Helvetia, Germania, Italia, vulgaris. — Non diversa verisimiliter a typo vulgari *M. esculentæ*. — Var. *abietina* (Leuba) Sacc. et Trott. *M. abietina* Leuba, Champ. comest. p. 89, t. 44, f. 5-7. — Pileo medio ex albo griseo-fulvo, ovato, subconico, stipiti basi adnato, areolis rhombeis irregularibus, minutis dein ampliatis. — In graminosis montanis sub Abietibus, frequens, gratissime edulis. — Cl. Leuba, l. c. p. 91-92, breviter describit (sine figuris) sp. novas sequentes: *M. radicata*, *M. pratensis*, *M. canina*, *M. alba* (= *M. vulgaris* a. *albida* Boud.), *M. autumnalis*, quæ verisimiliter sunt meræ formæ *M. esculentæ*, *M. conicæ*, *M. costatæ*.

4. *Morchella rigida* (Krombh.) Boud., Bull. Soc. Mycol. Fr. (1897) 5314 pag. 137, *M. conica* var. *rigida* Krombh. Abbild. der Schwämme III, p. 10, t. XVI, f. 13 et t. XVII, f. 1-2. — Media, 7-15 cm. alta, ascomate omnino adnato, conico dein oblongo, flavo-ochraceo, ut in *M. rotunda* sed magis elongato alveolisque longioribus, minus rotundatis, subseriatis, minus profundis, sepimentisque tenuioribus; sporidiis paullo crassioribus, 20-24 \times 13-14; stipite albidus basi incrassatulo.

Hab. ad terram in Gallia, Italia, Bohemia.

5. *Morchella rotunda* Fr. — Syll. VIII, p. 9 (ut var.) — var. *alba* 5315 Mérat., Fl. paris. I, p. 233. — Ascomate toto albo, senio flavicante dignoscitur.

Hab. ad terram in Gallia.

6. *Morchella deliciosa* Fr. — Syll. VIII, p. 10 — var. *elegans* Boud. 5316 Bull. Soc. Mycol. Fr. (1897) p. 144, *M. conica* Krombh. t. XVI, f. 9 et Barla Champ. Nice, tab. 42, f. 10, non Auct. — Multo elatior, 10-20 cm. alta; stipite grosse furfuraceo; alveolis majoribus et magis irregularibus.

Hab. ad terram Nicææ (Nizza) et Chartres Galliæ, rarior.

7. *Morchella elata* Fr. — Syll. VIII, p. 10. — var. *Clusii* Istv., in 5317
Clus. Ic. fung. p. 55, t. IV, f. 2. — Ascomate apice minus acuto
et subrufescente.

Hab. in Pannonia. — Var. *purpurascens* Boud., Disc. d' Eur.
p. 32, Krombh. Abbild. und Beschr., fasc. III, t. XVI, f. 24 (*M.*
elata). — Vix ascomatis colore magis purpurascente dignoscenda.
— In Bohemia et Gallia.

HELVELLA L. — Syll. VIII p. 17, XI p. 391, XIV p. 740, XVI
p. 697, XVIII p. 3.

1. *Helvella lactea* Boud., Icon. Myc. t. II, pl. 226 (1906) Hist. et 5318
Classif. Discomyc. Europe (1907) p. 36. — Media, 4-6 cm. alta,
tota alba, lactea; ascomate trilobato, subtus glabro, concolori; sti-
pите ad basim paululo incrassato, sulcato, costis parallelis raro a-
nastomosantibus, sat regularibus; ascis octosporis, cylindraceis, ad
basim attenuatis, 250-280 \approx 13-14; paraphysibus septatis, ad basim
divisis, ad apicem vix incrassatis, 6-7 μ . long.; sporidiis ellipsoi-
deis, albis, intus guttula oleosa media, crassa, raro granulis comi-
tantibus repletis, 16-17 \approx 10-11.

Hab. ad terram argillaceam in silvis Blois et Meaux Galliæ. —
Ab *Helv. crispa* differt statura minori, colore, stipite magis regu-
lariter cylindraceo, sporidiis minoribus.

2. *Helvella sulcata* Afz. — Syll. VIII, p. 20 — var. *pallidipes* Boud., 5319
Hist. et Classif. Discomyc. Europe (1907) p. 35. — A typo differt
statura minori et stipite albo v. albescente.

Hab. in Gallia præcipue meridionali.

3. *Helvella constricta* Boud., Hist. et Classif. Discom. Europe (1907) 5320
p. 36. — Minor, 3-5 cm. alta; ascomate bi- v. trilobo, nigro-ci-
nereo-fusco, minus anguloso; stipite sulcato albido vel albido-
cinereo.

Hab. ad terram pr. Nicæam (Nizza). — *Helv. sulcatæ* affinis
a qua præcipue differt sporidiis majoribus, ascomate minus expanso.

4. *Helvella Queletiana* Sacc. et Trav. — Syll. XIX, p. 850. — Ita 5321
vocetur *Helvella phlebophora* Sacc. — Syll. VIII, p. 20 [= *H.*
venosa Quél.], non Pat. et Doass.

5. *Helvella Cookeana* (Boud.) Sacc. et Trav. — Syll. XIX, p. 844 — 5322
Leptopodia Cookeana Boud., Icon. Mycolog. t. II, pl. 236, Hist. et
Class. Discom. Europe pag. 37 (1907), *Helvella ephippium* Cooke

Mycogr. n. 169, non Lév. — Media, robustior, pileo bi- aut trilobo, subtus et stipite brunneo-fulvis, villosis, hymenio saturatiore; ascis elongatis cylindraceis, octosporis, $380-400 \times 18-20$; paraphysibus ad apicem paululum incrassatis, $5-8 \mu$. spissis, fuliginis; sporidiis ellipsoideis intus guttula oleosa magna et guttulis minoribus repletis, $22-25 \times 9-10$; ascomatis pilis exterioribus septatis, fuliginis, $100-150 \times 10$.

Hab. ad terram argillaceam loco? — Ab *Helv. ephippio* statura majore, colore obscuriore, pubescentia magis distincta diversa.

6. *Helvella murina* (Boud.) Sacc. et Trav. — Syll. XIX, p. 849 — 5323

Leptopodia murina Boud., Icon. Mycol. pl. 481, Hist. et Class. Discom. Europe pag. 37 (1907). — Media, 2-5 cm. alta, tota cinerea, subtus cum stipite villosulo, hymenio concolore; ascomate bilobo, deflexo; stipite pleno, elongato, ad summam basim tantum pallido et sæpe sulcato; ascis clavatis, octosporis, ad basim paululum attenuatis, $360-370 \times 24-30$; paraphysibus simplicibus aut inferne tantum divisis, sub lente composita hyalinis, ad apicem clavulatis, $5-10 \mu$. spissis; sporidiis ellipsoideis, intus guttula magna media lutescente et guttulis minutis numerosis, ad apices positis repletis, $21-22 \times 12-13$.

Hab. ad terram argillaceam in silva Carnelle, Gallia. — *Helv. ephippo* affinis, a qua differt statum majori, colore uniformiter griseo, hymenio concolori, non fusco sporidiisque. — Var. *Huyoti* Boud., l. c. pag. 38. — A typo recedit stipite breviori, 2-3 cm. longo, ascomate majori usque ad 3 cm. lato, minus pezizoideo magis helvellaceo, extus pallidiore, fere glabro; stipite pubescenti, hymenio concolori; sporidiis minoribus $18-20 \times 10-12$; paraphysibus minus clavulatis apice tantum subincrassatis. — Prope Lagny (Seine-et-Marne) Gallia (M. Huyot).

7. *Helvella tremellosa* Krombh., Abbild. und Beschreib. fasc. III, 5324

pag. 31, t. XXI, fig. 7-8, ? *H. tremelloides* Hazsl. Rend. Kög. t. III, f. 4. — Ascomate lobato, irregulari, fulvo-fusco, lobis irregulariter deflexis, connatis, undulatis; costis primariis magnis, angulatis, rotundatis, secundariis minutis gyrosis, planiusculis; areolis irregularibus, profundis, celluliformibus v. planiusculis, fundo inæquali, lacunoso-costato, pallido; stipite irregulari, confluenti, albo, tremellosa-ceraceo, fragili, subfarcito, dein cavo, ramoso; ramis irregularibus, subcompressis, subasperis; mycelio tenui, albo.

Hab. ad terram in silva densa pr. Bukowan Bohemiæ.

Helvellæ species incertæ sequentes enumerantur in Syll. XIX, p. 851:
Helvella bicolor Raddi — *H. inflata* Cumino — *H. reflexa* Cumino
 — *H. tomentosa* Raddi — *H. undulata* Raddi.

VERPA Sw. — Syll. VIII p. 29, XIV p. 741, XVIII p. 6.

1. *Verpa perpusilla* Rehm, Ann. Mycol. VII (1909) p. 526, Ascom. 5325
 Exsicc. fasc. 45, n. 1857. — Ascomatibus gregariis, e mycelio al-
 bido subterraneo exortis, erectis, stipitatis, obtuse campanuliformi-
 bus, apice sæpe impressis, acute haud involute marginatis, haud
 corrugatis, extus subfuscis, 0,5-1 cm. alt., 2 cm. lat.; subtus cum
 stipite in medio inserto, plus minusve cylindrico, 3 mm., versus
 basim 5 mm. lat., ibique subcompresso, solido, glabro, 1,5-5 cm.
 alto, flavide albidis; ascis cylindraceis, apice rotundatis, c. 200 ×
 14, 8-sporis; sporidiis ellipsoideis, utrinque obtusis, 1-cellularibus
 cum gutta magna oleosa centrali, hyalinis, 15-20 × 9-10, monosti-
 chis; paraphysibus filiformibus, 3 µ. cr., versus apicem sensim
 usque ad 8 µ. lat., hyalinis.

Hab. inter Larices et Abietes, Blaniks Goods Algoma
 Wisc. America bor. (DODGE).

UNDERWOODIA Peck — Syll. X p. 1.

1. *Underwoodia Campbelli* Sacc., Ann. Mycol. VII (1909) p. 433. — 5326
 Magna, fasciculata, albo-lactea, carnosa, sparassoides, ex laminis
 varie inflexis et longitrorsum connexis (ad instar stipitis *Helvellæ*
lacunosæ) formata, hinc lacunoso-costata, ubique ascigera; hyme-
 nio 1 mm. cr., strato subhymeniali celluloso modo crassiusculo
 modo tenuissimo; ascis cylindricis longissimis, 270-320 × 7-8, p.
 sporifera 70-80 µ. longa, apice obtusis, operculatis, deorsum leni-
 ter tenuatis, octosporis; paraphysibus bacillaribus, apice vix in-
 crassatis, pluriguttulatis, hyalinis; sporidiis oblique monostichis,
 ellipsoideis, 11-12 × 5,5-6, vix asperulis, intus granulosi, hyalinis.

Hab. in areis carbonariis derelictis, probabiliter ex fragmentis
 ligneis infossis enascens in silvis fagineis prope Sora (Caserta)
 Junio 1909 (Prof. C. CAMPBELL). — Cæspites usque ad 15-18 cm.
 crassi. Asci in hymenio non semper parallele stipati, sed sæpius
 in fasciculos distinctos suborbiculares juncti. Tam hæc species quam
 typica (*A. columnaris* Peck) videntur paradoxæ; scilicet *Helvellæ*
 v. *Gyromitræ* species ascomate orbata, stipitibus vero maxime evo-
 lutis confluentibusque; mirum vero stipites hos (revera pseudosti-
 pites!) omnino et ubique superficialiter ascigeros esse!

Subfam. 2. Geoglosseæ (*).

Sect. Hyalosporæ.

MITRULA Fr. — Syll. VIII p. 32, X p. 1, XI p. 392, XIV p. 741, XVI p. 697, XVIII p. 6.

1. *Mitrula phalloides* (Bull.) Chev. — Syll. VIII, p. 33 — var. *aurantiaca* (Cumino) Boud. Ic. Mycol. III, pl. 427 bis (1909) *Helvella aurantiaca* Cum., Fung. Vall. Pisii in Act. Acad. Taur. (1805) p. 221, *Leotia uliginosa* var. *aurantiaca* (Cum.) Pers. Myc. Europ. I, p. 201. — Ascomate exiguo, convexo, aurantiaco, carnosogelatinoso, stipite albo-rubescente, fistuloso.

Hab. in truncis et ramis putridis in rivulis, Pesio Pedemontii et in Gallia.

MICROGLOSSUM Sacc. — Syll. VIII p. 39, X p. 2, XI p. 392, XIV p. 742, XVI p. 698, XVIII p. 6.

1. *Microglossum fusco-rubens* Boud., Icon. Mycol. t. III, pl. 426 (1909), Hist. et Classif. Discomyc. Europe (1907) p. 87. — Elatum, 7-9 cm. altum, fulvo-olivaceum, pediculo ad basim saturatiore fulvo-rubiginoso; clavula elongata, medio sulcata ad apicem attenuata, a stipite bene limitata; pediculo clavula brevior; ascis parvis, octosporis, claviformibus, 100-130 \times 10-12; paraphysibus linearibus ad apicem clavulatis, sub lente composita hyalinis, simplicibus aut ad basim divis, 3-5 μ . cr.; sporidiis oblongo-fusoideis, albis, intus 4-6-guttulis oleosis granulis comitantibus repletis, non septatis, 20-21 \times 4-4,5; carne ochracea.

Hab. ad terram argillaceam in silvis prope Montmorency Galliae. — *M. lutescenti* affinis sed differt colore ferrugineo, clavula longiore, paraphysibus minus clavatis etc.

2. *Microglossum longisporum* Durand, Ann. Mycol. VI (1908) p. 409, fig. 17-18, 206-206 a. — Ascomatibus gregariis, clavatis, multiformibus, 3-6 cm. altis; clavula oblonga v. elliptica, obtusa, compressa, sæpe sulcata, cinnamomeo-umbrina, 1-2,5 cm. long., 4-10 mm. lata; stipite tereti squamuloso, sæpe denique glabro nitente,

(*) De hac subfam. ofr. monographiam A. J. DURAND, *The Geoglossaceæ of North America*, in Ann. Mycol. vol. VI (1903) pp. 387-477, cum 222 fig.

cinnamomeo æquali, 2-4 cm. longo, 2-4 mm. lato; ascis cylindraceo-clavatis, apice rotundatis, poro J. cærulescente, 100-140 \times 12-15, octosporis; sporidiis biformibus, duobus longis, parallele positis, levibus, cylindraceis, demum 14-16-septatis, 60-100 \times 4-5, sex brevibus similibus, continuis, ad apicem asci irregulariter positis, 12-18 \times 3; paraphysibus filiformibus, 2 μ . cr., hyalinis, sursum leniter incrassatis, fortiter curvatis.

Hab. ad terram herbosam, New York, North Carolina, Michigan Amer. bor. — Ob bina sporidia septata et sena continua species ambigit inter *Microglossum* et *Leptoglossum*.

NEOLECTA Speg. — Syll. VIII p. 40.

1. *Neolecta aurantiaca* Feltg., Vorst. Pilzfl. Luxembg. Nachtr. IV 5330 (1905) p. 11. — Fungus omnino immaturus. Est potius *Clavaria* sp. ex ipso Auctore, confirmante cl. v. Höhnelt.

CUDONIELLA Sacc. — Syll. VIII p. 41, XI p. 392, XVI p. 698, XVIII p. 7.

1. *Cudoniella Allenii* A. L. Smith, Trans. Brit. Mycol. Soc. 1907, 5331 v. III (1908) p. 40, tab. I, fig. 10 a-d. — Sparsa v. subgregaria, minuta, circ. 2 mm. alt., 1,5-2 mm. lata, æruginea; ascomate ceraceo, convexo, subtus concavo, levi; stipite brevi, externe subochraceo v. subærugineo, interne hyalino-ochraceo; ascis oblongo-clavatis, versus basim attenuatis, 100 \times 8; sporidiis oblongis leniter curvatis, continuis dein pluri-plerumque 6-septatis v. pseudo-septatis, 17 \times 3, subærugineis dein hyalinis; paraphysibus filiformibus ramosis, ad apicem minute globosis 2,5 μ . diam.; disco et hymenio colore ærugineo suffuso.

Hab. ad ligna vetusta, Shropshire, Britannia (W. B. ALLEN).

2. *Cudoniella coniocyboides* Rehm, Ann. Mycol. V (1907) p. 533. — 5332 Ascomatibus sparsis, clavato-stipitatis, convexo-pileiformibus, margine subinvolutis, lacteis, glabris, ca. 400 μ . latis; stipite subcylindraceo, recto, levi, versus basim attenuato, 1,2 mm. alto, superiore parte flavidulo, 180 μ . lato, inferiore fuscidulo 120 μ . lato, glabro, contextu prosenchymatico ex hyphis parallelis flavidulis; ascis clavatis, apice rotundatis, 25-30 \times 4,5-5, octosporis; sporidiis subclavatis, 1-cellularibus, 5-6 \times 1,2-2, hyalinis, distichis; paraphysibus filiformibus, hymenium superantibus, hyalinis, 1,5 μ ., versus apicem 2-3 μ . crassis.

Hab. ad acus Pini silvestris putridos inter *Vaccinia*,

Pfaffenstein in Helvetia saxonica (FEURICH). — *Minutula*, habitu *Coniocybis*.

LEPTOGLOSSUM Cooke em Sacc. — Syll. VIII p. 47, XI p. 392, XIV p. 743, XVIII p. 8.

1. *Leptoglossum robustum* (Durand) Sacc. et Trav. — Syll. XX, p. 83 5333
— *Corynetes robustus* Durand, Ann. Mycol. VI (1908) pag. 416, fig. 40-44, 198-202. — Ascomatibus gregariis v. cæspitosis, atris, robustis, 2,5-8 cm. alt.; clavula brunneo-olivaceo tincta, obtusa, 1-3 cm. longa, 6-15 mm. lata, compressa v. sulcata; stipite tereti, brunneo-atro, glabro, nitenti, sursum leviter squamuloso, 1-4 cm. longo, 3-8 mm. lato; ascis clavatis, crassis, subsessilibus, apice contractis, poro J. cærulescenti, 100-150 \approx 10-12 (plurimis 120-135 μ .), octosporis; sporidiis sursum distichis, hyalinis, levibus, cylindræis, multiguttulatis, demum 7-11-septatis, 25-50 \approx 4-6 (30-40 μ .); paraphysibus hyalinis, filiformibus, 2-3 μ . cr., apice leniter incrassatis et curvatis, non v. leniter sursum cohærentibus.

Hab. ad terram sabulosam inter folia dejecta, Maine, Mississippi Amer. bor.

2. *Leptoglossum fumosum* Peck, Mus. N. Y. Nat. Hist. Bull. n. 116 5334 (1907) p. 25, *Microglossum fumosum* (Peck) Durand in Ann. Myc. VI (1908) p. 408, t. V, f. 15-16 et t. 19, f. 203-205. — Ascomatibus solitariis v. sæpius cæspitosis, clavatis, 2-6 cm. alt., parte ascigera obovata, elliptica v. oblonga, apice rotundata, plus minus compressa et longitud. sulcata, tertiam v. mediam partem ascomatis formante, satis discreta a stipite, e fumoso fulvescente, 0,7-3 cm. longa, 3-12 mm. lata; stipite tereti v. subcompresso 1-3 cm. long., 3-5 mm. cr.; argillaceo, squamuloso v. glabrescente et nitidulo, intus plurilacunoso; ascis clavatis 100-150 \approx 10-12, obturaculo jodo cærulescente, octosporis; sporidiis biseriatis, cylindricis, leviter curvis, initio continuis, denique 7-15-septatis, hyalinis, levibus, utrinque subrotundatis.

Hab. ad caudices putrescentes, Massachusetts et New York Amer. bor.

GEOGLOSSUM Pers. — VIII p. 42, X p. 2, XIV p. 743, XVI p. 699, XVIII p. 9.

1. *Geoglossum fallax* Durand, Ann. Mycol. VI (1908) p. 428, f. 61- 5335 64, 133-137. — Ascomatibus solitariis, clavatis, fulvis v. umbrinis, 2-8,5 cm. altis; clavula lanceolata, obtusa, compressa, 8-15 mm.

long., 3-5 mm. lata; stipite gracili, tereti, sursum squamuloso, 1-2 mm. crasso; ascis cylindraceo-clavatis, apice contractis, poro J. cærulescenti, 150-175 \times 15-18, octosporis; sporidiis subdistichis, cylindraceo-clavatis, primo continuis et multiguttulatis, demum 7-12-septatis, 65-105 \times 5-7 (plurimis 80-100 μ .), longe hyalinis demum fuligineis; paraphysibus filiformibus, hyalinis, septatis, sursum curvatis v. circinatis, apicibus abrupte ellipsoideis v. globosis 5-6 μ . cr.

Hab. ad terram argillosam in silvis, New York et Michigan Amer. bor. .

2. *Geoglossum pygmæum* Gerard in Durand, Ann. Myc. VI (1908) 5386 p. 429. — Ascomatibus pusillis, 0,5-2 cm. altis, exsiccatis brunneo-atris; clavula tenui, compressa; stipite gracili, leniter pilis fuscis septatis obsesso; ascis cylindraceo-clavatis, 175-200 \times 17-18, octosporis; sporidiis parallele positis, fuligineis, cylindraceo-clavatis, 15-septatis, 122-140 \times 6-7; paraphysibus rectis, filiformibus, deorsum hyalinis, rare septatis, 3 μ . crassis, sursum clavatis, fuligineis, septatis, constrictis, cellulis 12-14 μ . long., cellula terminali piriformi v. elliptica, 10-14 \times 7-8.

Hab. ad terram detritis ligneis mixtam, Poughkeepsie N. Y. Amer. bor. (W. R. GERARD).

3. *Geoglossum intermedium* Durand, Ann. Mycol. VI (1908) p. 431, 5337 fig. 66-67, 142-144. — Ascomatibus solitariis, atris, 3-4,5 cm. altis, clavula oblonga v. ovato-lanceolata, compressa, obtusa, 0,75-1,5 cm. longa, hymenio exsiccato alveolato; stipite gracili, tereti flexuoso, brunneo-atro, 0,75-1 mm. crasso, sursum pilis flexuosis, septatis, brunneis obsesso; ascis cylindraceo-clavatis, J. cærulescentibus, 150-200 \times 20, octosporis; sporidiis bi-multiseriatis, crassis, clavatis, obtusis, longe hyalinis, demum pallide brunneis, 7-11-septatis, 55-75 \times 6; paraphysibus filiformibus, subhyalinis, rectis, raro septatis, sursum clavatis, apice subpyriformibus v. subglobosis, apicibus cum ascis coherentibus epithecium brunneum formantibus.

Hab. in paludosis Knoxbora N. Y. (H. S. JACKSON) et in ligno putri Guelph Amer. bor. Ontario (J. H. FAULL).

4. *Geoglossum cohærens* Durand, Ann. Mycol. VI (1908) pag. 430, 5338 fig. 65, 138-139. — Ascomatibus clavatis, atris, 2,5-3,5 cm. altis; clavula tereti v. compressa, obtusa; stipite squamuloso; ascis clavatis, 150 \times 12-15; sporidiis inordinatis, cylindraceo-clavatis, longe hyalinis, demum pallido-brunneis, 0-7-septatis, 40-55 \times 5; paraphy-

sibus numerosis, filiformibus, ascos superantibus, raro septatis, apice abrupte clavatis v. piriformibus, brunneis, apicibus cohærentibus epithecium brunneum supra ascos formantibus.

Hab. ad terram sabulosam, Newfield New Jersey Amer. bor. (J. B. ELLIS).

5. ? *Geoglossum diffusum* Kütz., Philos. Bot. (1852) t. XX, fig. 1. 5339 (Verisimiliter idem ac *G. ophioglossoides*).
6. *Geoglossum Barlæ* Boud., Bull. Soc. Myc. Fr. (1888) p. 76, t. XVI, 5340 f. 1, Icon. Mycol. III, t. 424, Discom. Europ. p. 86. — Nigro-olivaceum, 3-5 cm. alt., clava compressa, glabra, sublinguiformi, 1-2 cm. lata; stipite pallidiore ad apicem nigro-furfuraceo; hymenio nigro-olivaceo, levi, non v. vix jove pluvio viscido, a stipite discreto, clavam intus plenam et fuliginosam tegente; ascis clavato-fusoideis, ad basim attenuatis et flexuosis, 300-320 \times 18-20, paraphysibus fuliginosis septatis, simplicibus v. inferne divisis, filiformi-clavulatis, sursum torulosis et eximie spiraliter contortis aut undulatis, ibique 6-10 μ . cr.; sporidiis fuliginosis cylindraceis, uno apice sensim attenuatis, rectis curvulisve, 7-septatis, 85-95 \times 6-7, intus granulosi.

Hab. ad terram argillaceam pr. Nicæam (BARLA) et Blois Galliæ (BOUDIER). — Ut monui in Syll. VIII, p. 45, forte tantum varietas *G. umbratilis* Sacc.

Subgen. *Glæoglossum* Durand. Ascomatibus viscidis.

7. *Geoglossum affine* (Durand) Sacc. et Trav. — Syll. XIX, p. 756 5341 — *Glæoglossum affine* Durand, Ann. Mycol. VI (1908) p. 421, fig. 73-74, 165-167. — Ascomatibus gregariis, atris, viscidis, 1,5-2,5 cm. alt.; clavula oblongo-clavata, obtusa, compressa; stipite gracili, levi; ascis clavatis, 7-septatis, 43-65 \times 5-6; paraphysibus filiformibus, 2,5 μ . cr., sursum clavatis, septatis, curvatis, fuliginosis, cellulâ apicali abrupte elliptica v. globosa, 7-8 μ . cr., cellulis inferioribus aut cylindraceis aut nodulosis aut sæpe moniliformibus, stipitem usque ad basim tegentes.

Hab. ad terram humosam, New York Amer. bor.

TRICHOGLOSSUM Boud., in Bull. Soc. Myc. Fr. I (1885) p. 109, *Geoglossum* subgen. *Trichoglossum* (Boud.) Sacc. Syll. VIII, pag. 45 (Etym. *thrix trichos* pilus et *glossum* pro *Geoglossum* h. e. *Geoglossum pilosum*).

1. *Trichoglossum hirsutum* (Pers.) Boud. — Syll. VIII, p. 46 (*Geoglossum*). — Var. *Doassansi* Patouill., Bull. Soc. Myc. Fr. XXV (1909) p. 129. — A typo differt sporidiis minoribus et parcius (7-) septatis, cylindraceis, rectis, brunneis, 85-95 \times 4-5.

Hab. in silva Gourzy pr. Eaux-Bonnes in Pyrenæis Galliæ (DOASSANS). — Var. *variabile* Durand, Ann. Mycol. VI (1908) p. 437, fig. 84-85, 182-184. — Sporidiis variabilibus, 80-150 μ . long., 8-14-septatis (plurimis 11-14-septatis); cetera ut in forma typica. — Ad terram humosam, New York, Delaware, N. Carolina. — Var. *Wrightii* Durand, l. c. p. 438, fig. 83, 174. — Sporidiis 110-140 μ . long., crassis, 8-9-septatis; cetera ut in forma typica. — In insula Cuba (WRIGHT).

2. *Trichoglossum gracile* Patouill., Bull. Soc. Mycol. Fr. XXV (1909) 5343 pag. 131. — Ascomatibus gregariis, atris, pusillis, 1-2 cm. altis, undique hirsutis; clavula ovata, obtusa, minuta, 1-3 mm. long., $1\frac{1}{2}$ -1 $\frac{1}{2}$ mm. lata, compressa, setulis brunneis, rigidis, acutis, longissimis (300-400 μ .) valde prominenter obsita; stipite gracili, filiformi, æquali, flexuoso, hispido; ascis clavatis, octosporis, 120 \times 20, jodo cærulescentibus; sporidiis fusiformi-clavatis, utrinque sensim attenuatis, 115-160 \times 5-6, transverse 15-septatis; paraphysibus filiformibus, septatis, sursum fuligineis, vix incrassatis; cystidiis brunneis valde elongatis.

Hab. in muscis truncorum, Nova Caledonia (LE RAT).

3. *Trichoglossum rasum* Patouill., Bull. Soc. Mycol. Fr. XXV (1909) 5344 p. 130. — Ascomatibus gregariis, magnis usque ad 15 cm. altis, atris; clavula valde compressa, spathulata, lanceolata, sæpe inciso-crenata, 3-5 cm. longa, 6-20 mm. lata, sub lente vix setulosa; stipite gracili, 2-3 mm. crasso, tereti, flexuoso, hirsuto, setulis brunneis, rigidis, longiusculis, acutis; mycelio floccoso, brunneo, ex hyphis gracilibus, tenuibus, ramosis formato; ascis cylindraceo-clavatis, jodo cærulescentibus, 200 \times 20 circ. cr., octosporis; sporidiis opacis, brunneis, clavatis, una fine abrupte acutatis, 7-9-septatis, crassis, 115-140 \times 7-9; cystidiis opacis, spiniformibus, vix excedentibus, 260 \times 12; paraphysibus filiformibus, fuligineis, sursum uncinatis, vix incrassatis (4 μ .).

Hab. ad terram quisquillasque in silvis montis Koghis Novæ Caledoniæ (LE RAT). — *Th. Walseri* proximum.

SPATHULARIA Pers. — Syll. VIII p. 48, XIV p. 744, XVIII p. 10.

1. *Spathularia linguata* A. E. Johnson, Bull. Minn. Ac. Nat. Sc. I 5345

(1880) p. 370; Durand, Ann. Mycol. VI (1908) p. 462. — Gregaria, raro solitaria, 2,5-5 cm. alta, capitulo stipite magnitudine subæquante, 0,5-2 cm. lato; capitulo lingulato, tenui, compresso, subæquali, albo, v. albo et colore flavido v. ferrugineo picto; stipite albo v. flavido-albo, crasso, firmo; ascis elongatis, clavatis; sporidiis filiformibus, ascos longitudine fere subæquantibus, rectis v. curvis, multiguttulatis.

Hab. inter muscos in paludosis, Amer. bor. — Sec. Durand verisimiliter cum *Spath. clavata* comparanda.

VIBRISSEA Fr. — Syll. VIII p. 51, XI p. 392.

1. *Vibrissea foliorum* Thaxter in Durand, Ann. Mycol. VI (1908) 5346 p. 454, fig. 113. — Ascomatibus gregariis, stipitatis, mollibus; parte ascigera convexa, 1-1,5 mm. lata, luteo-aurantiaca; stipite pallido, 2-5 mm. longo, gacili, translucido, deorsum pilis obsesso; ascis gracilibus, cylindraceis, apice rotundatis, J. non cærulescentibus, 150-180 \times 5-6; sporidiis 8, parallele positis, hyalinis, filiformibus, 85-100 \times 1; paraphysibus filiformibus, hyalinis, apice leniter piriformibus.

Hab. in foliis et cupulis quercinis emortuis, West Haven Conn. (R. THAXTER). — *V. truncorum* affinis sed valde distincta.

Fam. 12. Pezizaceæ

Sect. 1. Hyalosporæ.

SPHÆROSOMA Kl. — Syll. VIII p. 56, XVIII pag. 11. — Quoad genus et ejus synonymiam cfr. ROUPPERT *Revision du Genre Sphærosoma*, cum icon. et 2 tab. in *Bull. Acad. Sc. Crac.* (1908) p. 649 et (1909) p. 90 et SETCHELL in *Univ. of California Public. in Bot.* IV (1910) p. 114.

1. *Sphærosoma Janczewskianum* Rouppert, Bull. Ac. Sc. Cracovie 5347 (1908) p. 649, (1909) p. 90, f. 5-6. — Ascomatibus dispersis, subgloboso-discoideis 2-5 mm. diam., olidis, aurantiacis, basi solito latiore, rhizoidibus arenæ immixtis instructis, marginatis; hypothecio pseudoparenchymatico, hyphis ascogenis stratum subhymeniale formantibus, una cellula ascogena 40-56 μ . lata, periphysibus 8-10 μ . cr. hymenium cingentibus circumdata; ascis cylindraceis 8-

sporis, 220-270 \approx 18-24, hyalinis, paraphysibus multo longioribus, parte apicali superficiem hymenii formantibus, 300-320 \approx 4, ad apicem 6-8 μ . latis, guttulatis; sporidiis sphæroideis, hyalinis, immaturis vix ellipsoideis, echinulatis, 18-22 μ . d., echinulatis, 1-2 μ . long.

Hab. in terra arenosa prope fontem inter Gramina et Muscos, in Polonia ad Raciazek prope Vistulam fluvium. — *Sphaeros. echinulato* Seav. proximum, sed differt fabrica coloreque ascomatum, ascis cylindraceutis nec subclavatis, sporidiis minoribus, echinulis brevioribus, paraphysibus brevioribus et tenuioribus, guttulatibus, periphysibus.

RUHLANDIELLA P. Henn. — Syll. XVII p. 241. (Ex errore calami inter Hymenogastraceas locata).

1. *Ruhlandiella hesperia* Setchell, Univ. of California Public. in Bot. 5348 v. IV (1910) n. 5, p. 116, tab. 15. — Ascomatibus cartilagineo-carnosis, dilute fuscis, hemisphæricis aut late reniformibus, 2-6 mm. diam., inferne brevi stipite aut paucis fasciculis mycelialibus suffultis, externis hymenio omnino vestitis, internis pseudoparenchymaticis; ascis cylindraceuto-clavatis, 200-250 μ . longit, 24-28 μ . diam., Jodi ope cærulescentibus, paraphysibus elongatis, gracilibus, lente aut passim moderate apice tumidulis, ad apices maxime curvatis et in gelatinæ strato pigmentato conglutinatibus multo quam ascis longioribus; sporidiis sphæroideis, dilutissime fuscis, irregulariter alveolatis, 21-25 μ . diam.

Hab. ad terram sub foliis Eucalypti sp. in Berkeley, California (N. L. GARDNER).

ACETABULA (Fr.) Fuck. — Syll. VIII p. 59, XVI p. 701, XVIII p. 13.

1. *Acetabula Barlæ* Boud., Hist. et classif. Discomyc. Europe (1907) 5349 p. 40; Icon. Mycol. II, tab. 245. — Major, 3-5 cm. alta, totidem lata, ascomate cupulato, intus intense fuligineo-nigro, extus pallidiore, minute furfuraceo-velutino; pediculo brevi, crasso, albido, costis dichotome ramosis ad dimidiam partem cupulæ productis et extremitatibus fuliginosis; ascis majoribus, cylindraceuto-clavatis, 360-380 \approx 16-20; paraphysibus pallide fuliginosis, ad apicem incrassatis, 8-9 μ . latis; sporidiis ellipsoideis, guttula oleosa media maxima et granulis majoribus repletis, 20-32 \approx 11-12.

Syll. fung. XXII (XII-1912)

Hab. ad terram pr. Nicæam [Nizza] (BARLA). — Ab *Ac. vulgari* et *ancili* colore obscuriore et sporidiis minoribus diversa.

2. *Acetabula longipes* (Boud.) Sacc. et Trott., *Cyathipodia longipes* 5350
Boud., Hist. et Classif. Discomyc. Europe (1907) p. 39. — Major, 5-6 cm. alta, 4-5 lata, ascomate longe pedunculato, intus fulvo, extus pallidiore, tantum pruinoso, pediculo pallido, elongato, 5-6 mm. crasso, costato-sulcato, costis breviter sub cupula prominentibus non divisis, sursum pruinoso; ascis majoribus, 350-400 \times 20-24, octosporis; paraphysibus elongatis, pallidis, ad apices incrassatis, 7-10 μ . crassis; sporidiis ellipsoideis, majoribus, intus guttula oleosa media crassa et guttulis minoribus repletis, 20-24 \times 13-15.

Hab. ad terram, Lagny prope Parisios. — Inter *Cyathipodium* et *Acetabulam* media.

3. *Acetabula platypodia* (Boud.) Sacc. et Trav. — Syll. XIX, p. 4 — 5351
Cyathipodia platypodia Boud., Hist. et Classif. Discomyc. Europe (1907) p. 39; Icon. Myc. II, tab. 241. — Minor 2-3,5 cm., ascomate fulvo-cinerecente, cupulato, extus concolore sed pallidiore, granuloso-puberulo; stipite late compresso, bicostato; ascis octosporis, cylindraneo-clavatis, 280-300 \times 15-18; paraphysibus elongatis, pallidis, ad apicem clavulatis, intus granulosus, clava 5-6 μ . cr.; sporidiis minoribus, ellipsoideis, achrois, intus guttula oleosa media crassa et rarius granulis paucis adjunctis repletis, 15-18 \times 12.

Hab. ad terram pr. Nicæam (Nizza).

GEOPYXIS Pers. — Syll. VIII p. 63, X p. 3, XI p. 393, XIV p. 744, XVI p. 702, XVIII p. 14.

1. *Geopyxis alpina* v. Höhn., Ann. Myc. III (1905) pag. 555, cum 5352
icon. — Ascomatibus sparsis, 3-8,5 mm. latis et altis, tenuibus, e cupulato suburceolatis, basi brevissime stipitiforimi-angustatis, supra plerumque parum contractis, margine pallidiore, tenui, denticulato, intus extusque concoloribus, rubido-flavo-ochraceis, subglabris, subnitidis; ascis cylindraceis 300 \times 12, octosporis; sporidiis recte v. suboblique monostichis, hyalinis, late ellipsoideis, levibus, plerumque mucoso-vestitis, guttulatis, 15 \times 8-9,5; paraphysibus filiformibus 2-3 μ . cr., apice non incrassatis; contextu pseudoparenchymatico, cellulis circ. 12 μ . diam. J —.

Hab. ad terram calcaream parum humosam, Schneeberg Austriae inf., 1400 m. alt.

2. *Geopyxis ? granulosa* P. Henn., in Voeltzkow Reise Ostafrika III 5353
(1908) p. 32, tab. III, fig. 27. — Ascomatibus singularibus, cam-

panulato-concatis, carnosus, extus pallide cinereis, granulato-verrucosis, margine crenulato-incisis c. 2-2,5 cm. diam., disco levi pallide olivaceo; ascis cylindraceo-clavatis apice rotundatis, octosporis, 180-230 \times 12-16; paraphysibus basi ramosis, filiformibus, ad apicem incrassatis, septatis, guttulatis, olivaceis, 2,5-3 μ . cr.; sporidiis ellipsoideis, hyalinis, levibus, 1-2-guttulatis, 8-11 \times 6-7.

Hab. ad terram muscosam, Fénérive Madagascar. — A typo generis ascomatibus extus granulato-verrucosis recedit.

3. *Geopyxis scabra* Rehm, Hedw. XXVIII (1889) p. 302, t. 7, f. 15. 5354
— Ascomatibus cyathoideis, stipitatis; stipite 7 mm. alto, vix 2 mm. cr.; cupula 3 cm. lata, 1 cm. alta, glabra, cervino-fuscidula, punctulis albis maculata, margine integro prædita, disco pallide cervino; ascis cylindraceis, crassis, apice rotundatis, octosporis, 250 \times 18, paraphysibus ramosis, 2 μ . cr., hyalinis, apice haud conglutinatis obvallatis; sporidiis ellipsoideis, crasse tunicatis, 1-cellularibus, levibus, dilute flavidulis, intus granuloso-oleosis, 25-27 \times 12-14, monostichis.

Hab. ad lignum, patria ignota (ex herb. Berolinensi).

PEZIZA Dill. em. — Syll. VIII p. 73 et 511, X p. 3, VI p. 393, XIV p. 744, XVI p. 703, XVIII p. 16.

1. *Peziza gigantea* (Rehm) Sacc. et Trott., *Pustularia gigantea* Rehm, 5355
Ascom. Amer. bor., Ann. Myc. v. III (1905) p. 517. — Ascomatibus cæspitosis, sessilibus, vix stipitiformiter elongatis, irregulariter urceolatis, margine demum undulato et plus minusve inciso, disco flavescente undulato, extus glabris, parenchymatice contextis, albescentibus, 12 cm. diam., siccis corrugatis, fuscescentibus, carnosus; ascis cylindraceis, apice truncatis, 300 \times 10, jodi ope totis cærulescentibus, octosporis; sporidiis oblongis, utrinque rotundatis, glabris, 1-cellularibus, haud guttatis, hyalinis, 10-12 \times 5-6, monostichis; paraphysibus filiformibus 2 μ ., versus apicem 3,5 μ . cr., dilute flavidulis.

Hab. ad terram, Machirac Island Mich. Amer. bor. (HARPER).
— A *Peziza vesiculosa* magnitudine ascomatis et sporidiis dimidio minoribus inprimis diversa.

2. *Peziza amplissima* (Boud.) Sacc. et Trav. — Syll. XX, p. 309 — 5356
Aleuria amplissima Boud., Icon. Myc. t. II, pl. 263; Hist. et Clas. Discomyc. Europe (1907) p. 44. — Maxima, 5-10 cm. lata, cupulata et subundulata, extus ad basim subglabra, pallida, ad marginem ochraceo-fuscescens aut lutescenti-ferruginea, grosse fur-

furacea et minute denticulata, hymenio fusco aut fusco-brunneo; ascis cylindraceutis, pallide fuscescentibus, octosporis, 280-300 \times 14-16; paraphysibus hyalinis, intus spumosis, ad apices clavulatis, 8-13 μ . crassis; sporidiis ellipsoideis, hyalinis, extus minutissime et vix perspicue granulosi, 16-18 \times 9-10.

Hab. ad terram sabulosam in silvis Beauchamp et Isle-Adam Gallia. — *Aleuria amplissima* Fr. est *Pez. coronaria* Jacq.

3. **Peziza mirabilis** (Rehm) Sacc. et Trott., *Plicaria mirabilis* Rehm 5357 in Strasser Verh. k. k. zool.-bot. Ges. Wien LX (1910) p. 477; absque diagnosi. — Magna, hymenio obscure brunneo; sporidiis non guttulatis, levibus; paraphysibus supra incurvatis, brunneis.

Hab. in areis carbonariis, Sonntagberg Austria.

4. **Peziza vesiculosa** Bull. — Syll. VIII, p. 83 — var. *apapophysata* 5358 Speg., Myc. Arg. IV, in Ann. Mus. Buenos Aires (1909) p. 442. — Tantum differt ascis semper paraphysibus destitutis.

Hab. ad terram humosam in hortis, Los Hornos pr. La Plata, Argentina.

5. **Peziza silvestris** (Boud.) Sacc. et Trav. — Syll. XX, p. 317 — 5359 *Aleuria silvestris* Boud., Icon. Mycol. II (1906) pl. 261; Hist. et Class. Disc. Europe (1907) p. 44. — Magna, sessilis, 4-8 cm. lata, e cupulato applanata, extus pallida, subtiliter tomentoso-furfuracea, intus fusco-fuliginea, margine sublobato lutescente; paraphysibus hyalinis, ad apicem clavulatis 6-8 μ . cr.; ascis clavato-cylindraceutis, octosporis, 220-250 \times 14-15, jodo cærulescentibus; sporidiis ellipsoideis, albis, levibus, sed intus minutissime granulosi, vacuolo centrali plus minusve conspicuo, 17-18 \times 9-10.

Hab. ad terram sabulosam in silvis Fontainebleau Gallia.

6. **Peziza ampliata** Pers. — Syll. VIII, p. 92 — var. *costifera* Boud., 5360 Icon., Mycol. t. II, pl. 264 bis (1906), Hist. et Classif. Discomyc. Europe (1907) p. 44 (*Aleuria*). — A typo differt ascomate subtus costulis simplicibus v. bifurcatis prædito.

Hab. ad terram prope Montmorency. — var. *palustris* Boud., l. c. p. 44 (1907). — A typo differt forma minus cupulata, plus pulvinata, ascomatibus magis sessilibus crassioribus et regularibus, paraphysibus apice magis distincte clavulatis. — Ad lignum putrem Ecouen et Angers, Gallia.

7. **Peziza annamitica** (Pat.) Sacc. et Trott., *Aleuria annamitica* Patouill., Bull. Soc. Myc. de Fr. XXV (1909) p. 3, tab. II, fig. 3. — Magna, 6-8 cm. diam., carnosa, fragilis; ascomate sessili, cupuliformi dein expanso, plicato-undulato, margine inciso sinuato,

extus albo, glabro, hymenio castaneo; ascis longis, 18-20 μ . latis, operculatis, 8-sporis; paraphysibus numerosis, granulis castaneis repletis, linearibus, apice incrassatis, 8-10 μ .; sporidiis ovoideis, majusculis, 25 \times 17, biguttulatis, verrucis validis, obtusis v. acutiusculis dense obsessis.

Hab. in ligno putri terra immixta, in silva Kam ly, Annam Asiæ (EBERHARDT). — *Pezizæ Emileiæ* Cooke proxima.

8. *Peziza spiralis* (Hazsl.) Sacc. et Trav. — Syll. XX, pag. 317 — 5362

Pustularia spiralis Hazsl., Magyar Discom. p. 270, t. I, f. 32. — Ascomatibus sessilibus, concavo-scutellatis, centro tantum affixis, 5-6 cm. latis, carnosis, albidis, margine obtusulo, disco atro-purpureo; ascis tereti-clavatis, apice rotundatis, infra medium (abnormiter?) spiraliter contortis, octosporis; sporidiis elliptico-fusoideis, utrinque acutiusculis, hyalinis.

Hab. ad terram in silvis pr. Eperies Hungariæ.

9. *Peziza sundaica* (v. Höhn.) Sacc. et Trott., *Pustularia sundaica* 5363

v. Höhn., Stzb. k. Ak. d. Wiss. Wien, CXVIII, Abt. I (1909) p. 395. — Ascomatibus carnosis e globoso patellaribus usque ad 4 cm. latis et 3 cm. altis, tenuibus griseo-flavidis v. pallide griseo-alutaceis, extus glabris, basi in pedicellum brevem (3-5 mm.) crassum granuloso-pruinose angustatis; contextu parenchymatico; ascis cylindræis, octosporis, 200-260 \times 14, apice operculatim aperientibus; paraphysibus filiformibus, apice parum claviformi incrassatis; sporidiis supra monostichis, hyalinis, levibus, ellipsoideis, 14-15 \times 9-9.5. J. +

Hab. ad terram in silvis primævis, Tjibodas in ins. Java. —

Pust. variæ (Hedw.) affinis.

10. *Peziza rubro-fusca* (Rehm) Sacc. et Trott., *Plicaria rubro-fusca* 5364

Rehm, Ascom. Amer. bor., Ann. Myc. v. III (1905) p. 577. — Ascomatibus cæspitose congregatis, sessilibus, in stipitem brevissimum elongatis, demum patellaribus, disco crasse subcrenulato-marginato, plano, orbiculari, demum irregulariter undulato, excipulo glabro, e cellulis parenchymaticis c. 20 μ . diam., externis fusciculis contexto, rubro-fuscis, 2-4 cm. diam., ceraceis; ascis cylindræis, apice truncatis, jodo cærulescentibus 300 \times 10, octosporis; sporidiis ellipsoideis, utrinque rotundatis, glabris, 1-cellularibus cum guttis 2 magnis oleosis, hyalinis, 15-17 \times 7-8, monostichis; paraphysibus, filiformibus, 2 μ ., ad apicem clavatam flavo-fuscam 6 μ . cr.

Hab. ad terram, Isle Royale Mich. Amer. bor. (HARPER). —

Juxta *Pezizam sepiatram* et *sepiatrellam* ponenda species, magnitudine et colore ascomatum et sporidiis minoribus plane aliena.

11. *Peziza repandoides* (Rehm) Sacc. et Trott., *Plicaria repandoides* 5365

Rehm, Ascom. Amer. bor., Ann. Myc. v. III (1905) p. 518. — Ascomatibus sessilibus, patellaribus, ad basim brevissime substipitatis, disco orbiculari plano, dein umbilicato-undulato, tenuissime mox incise marginato, hyalino-fuscidulo, excipulo glabro, contextu parenchymatico, amylaceo-albescente, 3-4 cm. diam., siccis disco albo-pruinosis, vario modo complicatis, ceraceis; ascis cylindraceis, apice truncatis ibique jodo cærulescentibus $300 \approx 10$, octosporis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, haud guttatis, levibus, $12-14 \approx 6-7$, monostichis; paraphysibus filiformibus, septatis, 2 μ ., versus apicem 3 μ . cr., ibique flavidulis et subcurvatis.

Hab. ad lignum putridum Populi, Port Byron Ill. Amer. bor. (HARPER). — Pertinet ad stirpem *Pezizæ repandæ* et *ampliatae*; ab utraque forma haud clavata paraphysium nec minus sporidiorum minutie divergens.

12. *Peziza scissa* Karst., Acta Soc. pro Faun. et Fl. fenn. XXVII, 5366

4 (1905) p. 13. — Ascomatibus subcæspitosis, sessilibus, contortis, latere scissis, margine integro, involuto, extus pruinosis, alutaceis, disco obscuriore, 2-3 cm. latis; ascis longissimis 10 μ . circ. cr.; sporidiis monostichis, ellipsoideis, levibus, biguttulatis, hyalinis, circiter $12 \approx 5$; paraphysibus filiformibus, flexuosis, circ. 1 μ . cr.

Hab. in fragmentis ligneis terraque in regione Kuopioënsi, Fennia (O. LÖNNBOHM). — Ad *Pez. cochleatam* nec non *P. alutaceam* proxime accedit.

13. *Peziza humicola* (Boud.) Sacc. et Trav. — Syll. XX, p. 314 — 5367

Aleuria humicola Boud., Icon. Myc. t. II, pl. 262 (1906), Hist. et Classif. Discomyc. Europe (1907) p. 45. — Media, 2-3 cm. lata, sessilis, ochraceo-citrina, extus concolor, minute furpuracea, margine subcrenulata; hymenio cupulare, dein applanato; ascis maximis, cylindrico-clavatis, octosporis, operculatis, jodo cærulescentibus, $450-460 \approx 24-28$; paraphysibus linearibus, albis, intus spumosis, ad apicem parum incrassatis, 6-8 μ . cr.; sporidiis hyalinis, majoribus, ellipsoideis, $25-28 \approx 12-14$.

Hab. ad terram in viridario Montmorency, Gallia. — Colore et magnitudine sporidiorum distincta.

14. *Peziza lilacina* (Boud.) Sacc. et Trav. — Syll. XX, pag. 315 — 5368

Aleuria lilacina Boud., Icon. Mycol. t. II, pl. 277 (1906), Hist. et Classif. Discomyc. Europe (1907) p. 45. — Media, 1,5-4,5 cm.

lata, cupularis, dein applanata, extus glabra, tantum ad marginem lutescentem minutissime furfuracea, pallide cinereo-purpurascens aut lilacina, hymenio saturatiore dein expallente; ascis cylindraceis, octosporis, 250-300 \times 12-14; paraphysibus tenuibus, ad apicem vix incrassatis, septatis, 4-5 μ . cr., hyalinis; sporidiis ellipsoideis, intus non guttulatis et granulis externis ad extremitatem positis denique secedentibus ornatis, 13-15 \times 8-9.

Hab. ad terram herbosam combustam, Gallia merid. (ROLLAND).

— *Aleur. violaceæ* affinis sed differt colore pallidiore, paraphysibus hyalinis, sporidiis minoribus etc.

15. *Peziza asterigma* (Vuill.) Sacc. et Trav. — Syll. XX, p. 309 — 5369

Aleuria asterigma Vuill. Assoc. franç. Avanc. Sc. (1886) pag. 1, t. X (extr.), Boudier, Ic. Mycol. t. 266. — Ascomatibus solitariis v. paucis caespitosis, breviter obconico-stipitatis v. subsessilibus, nunc infundibuliformibus, nunc irregulariter expansis margineque incisis, ceraceis, ex albido brunneolis, basi albo-byssinis, extus minute verruculosus; disco concavo rarius convexo, 15-25 mm. lato, rarius usque ad 30 mm.; ascis octosporis, cylindraceis, deorsum tenuatis, apice truncatis, operculatis, jodoque tinctis, 300 \times 19; paraphysibus filiformi-clavulatis, septulatis, ascum vix superantibus; sporidiis oblique monostichis, ellipsoideis, 23 \times 13, pro more 1-guttulatis, hyalinis.

Hab. in fimo, sponte evoluta in laboratorio botanico, Nancy Galliae. — Socius adest status conidiophorus, qui omnino videtur *Edocephali* species a peraffini *Ed. fimetario* (Riess) Sacc. vix diversa conidiis brevioribus, nempe 6,5 \times 3, pariter ex hyalino ochraceis et vesicula 25 μ . diam. pariter sphaerica, muriculata.

16. *Peziza paludicola* (Boud.) Sacc. et Trav. — Syll. XX, p. 315 — 5370

Aleuria paludicola Boud., Icon. Mycol. t. II, pl. 269 (1906), Hist. et Classif. Discomyc. Europe (1907) pag. 46. — Minor, 1-2 cm. lata, breviter stipitata, carnosa, spissa, hymenio plano non cupulato, fulvo, extus pallescens minute furfuracea; ascis majoribus, octosporis, hyalinis, 330-400 \times 20-25, jodo leniter caerulescentibus; paraphysibus crassis, parce septatis, ad apicem incrassatis, 18-22 μ . cr., pallide ochraceis; sporidiis majoribus, ellipsoideis, hyalinis sed leniter ochraceo-tinctis, 23-26 \times 12-15.

Hab. ad folia putrida Caricis in paludosis prope Montmorency, Gallia. — *Pezizæ ampliatae* var. *palustri* affinis sed differt ascomate stipitato, paraphysibus, ascis, sporidiis majoribus etc.

17. *Peziza Labessiana* (Boud.) Sacc. et Trav. — Syll. XX, p. 315 — 5371

Aleuria Labessiana Boud., Icon. Mycol. t. II, pl. 282 bis (1906) Hist. et Classif. Discomyc. Europe (1907) pag. 46. — Media aut minor, 1-2 cm. lata; ascomate sessili, extus ad basim pallido et ad marginem umbrino et furfuraceo, hymenio saturatiore badio-fuligineo; ascis, elongatis, octosporis, vix fusciscentibus, 260-300 \approx 17-18, jodo cærulescentibus; paraphysibus tenuibus, septatis, pallide fuliginosis, ad apices vix incrassatis, 2-7 μ . cr.; sporidiis achrois, ellipsoideo-ovatis, extus minutissime verruculosi, intus granulis minutis in acervulos extremitatibus conglomeratis denique evanescentibus, sed non guttulis oleosis repletis, 15-17 \approx 10-11.

Hab. ad terram herbosam, Angers Galliae (M. LABESSE). — *P. olivaceæ* affinis a qua differt statura minori, colore magis fuligineo, sporidiis minoribus sed latioribus etc.

18. *Peziza contorta* (Rick) Sacc. et Trott., *Plicaria contorta* Rick, 5372
 Broteria V (1906) p. 30. — Ascomatibus gregariis, mutua pressione deformibus, 1 cm. latis, margine obtuso, undulato, viridiflavis, extus furfure pallidiore tectis, sessilibus; ascis 250-350 \approx 13-18, octosporis, jodi ope cærulescentibus; sporidiis ellipsoideis, demum guttulatis, hyalinis v. subflavidulis, episporio levi, uniseriabilibus, unilocularibus; paraphysibus versus apicem sensim valde dilatatis, capite usque ad 10 μ . latis, dilute fuscidulis.

Hab. ad terram, Rio Grande do Sul Brasiliæ. — *Pezizæ delectanti* Starb. affinis.

OTIDEA (Pers.) Fuck. — Syll. VIII p. 94, X p. 4, XI p. 394, XIV p. 560, XVI p. 507, XVII p. 688.

1. *Otidea felina* (Pers.) Bres., F. Trident. II, p. 103, t. 215, *Peziza* 5373
felina Pers., Myc. Europ. I, p. 223. — Ascomatibus auriformibus, usque ad basim perviis, griseo-cinereis, e flocculoso glabrescentibus, 3-4,5 cm. alt., 2-3 cm. latis, basi attenuato-subradicatis, disco levi, pallide alutaceo, carne pallida, miti, inodora; ascis cylindraceis pedicellatis, jodo non tinctis, 170-200 \approx 9-12; paraphysibus ramosis, apice curvato v. recto, vix incrassato, 3-4 μ . cr.; sporidiis ellipsoideis, 2-guttulatis, 11-13 \approx 6-8.

Hab. in silvis Coniferarum in agro Tridentino, subcæspitosa. — Hypothecii contextus sub ascis subparenchymaticus, medio hyphoso-intricatus, excipuli subparenchymaticus in hyphas fasciculatas productus.

DISCINA Fr. — Syll. VIII p. 99, X p. 4, XI p. 395, XIV p. 747, XVI p. 708, XVIII p. 21.

1. **Discina repanda** (Wahlb.) Fr. — Syll. VIII, p. 100 — var. **ter-** 5374
restris Bres., Fung. Trid. tab. 190 (*Peziza varia* f. *terrestris*). — A typo differt habitatione terrestri, statura pro more majore, disco saturatius colorato, margine evidentius crenulato; cetera eadem.

Hab. ad terram juxta vias v. ad margines agrorum in agro Tridentino. — Sub *Peziza varia* Hedw. cl. Bresadola colligit, ut varietates, *Discinam repandam*, *Geopyxidem Catinum* et hanc formam terricolam.

2. **Discina disticha** Starb., Ascom. Schwed. Chaco-Cordill. Exp., Ar- 5375
kiv f. Bot. Bd. V (1905) p. 2, fig. 2. — Ascomatibus cupulatum applanatis, basim versus oblique contractis vel breviter fere stipitatis, stipite plicato, margine acuto, paullum repando, crenulato, lateritiis, disco pallidiore, contextu carnosogelatinoso, hyalino, intricato, c. 3 cm. diam.; ascis octosporis, cylindraceis vel subclavatis, sursum obtusatis, $80-90 \times 25$; sporidiis hyalinis, oblongatis, curvulis vel inæquilateralibus, in superiore parte asci primo sæpe transversim jacentibus vel conglobatis, denique omnibus sæpissime distichis, guttulatis, 25×11 ; paraphysibus numerosis, hyalinis, guttulatis, filiformibus, $1,5 \mu$. crassis, sursum non incrassatis.

Hab. in ligno mucido in silva primæva, col. Ijuhy Rio Grande do Sul, Brasilia (MALME). — Quoad locum in systemate hæc species valde dubia; ob texturam facile inter Ombrophilas locanda, ab illis autem magnitudine, a Pezizis veris sporidiis distichis divergit.

3. **Discina ? lenta** Starb., Ascom. Schwed. Chaco-Cordill. Exp., Ar- 5376
kiv f. Bot. Bd. V (1905) pag. 2, fig. 1. — Ascomatibus evolutis late expansis, disco convexo vel applanato, acute marginatis, subtus stipiteque breviter et crasse sulcatis, farinoso-puberulis, inæqualiter sed non lobatim determinatis, sordide albidis, hymenio flavovirescente; contextu dense intricato hyphis angustis, stipitem versus magis porrectis, in pariete excipuli membranaceo-porrectis, 1-3 cm. diam.; ascis octosporis, cylindraceis vel cylindraceo-subclavatis, sursum obtuse rotundatis, membrana perpaullum incrassata, $140-153 \times 15$; sporidiis hyalinis, imbricatim monostichis, oblongato-ellipsoideis, plerumque curvulis vel inæquilateralibus, guttulis duabus ornatis, $25-30 \times 11,5-12$; paraphysibus numerosis, hyalinis, conglutinatis, filiformibus, $1-2 \mu$. latis, sursum perpaullum clavulatum incrassatis, clavula $1,5-2,5 \mu$. crassa, ascos æquantibus.

Hab. ad terram? Rio Grande do Sul, col. Ijuhy (MALME). —

Quoad genus dubia species, contextu distincta.

4. *Discina ferruginascens* (Boud.) Sacc. et Trott., *Disciotis ferrugi-* 5377
nascens Boud., Hist. et Class. Discomyc. Europe (1907) pag. 42,
Icon. Mycol. t. II, pl. 274. — Pro genere minor, 1-2,5 cm., pallide
fulva leniter ferruginascens, primo cupularis, dein applanata, sub-
tus pallidior glabra; ascis cylindraceis, octosporis, ad basim subat-
tenuatis, 250-280 \times 12; paraphysibus gracilibus supra leviter in-
crassatis 3-4 μ . latis; sporidiis hyalinis, ovato-fusoideis, ad apices
non granulosi, 14-17 \times 7-8, Jodi ope immutatis.

Hab. ad terram pr. Nizza (BARLA). — Teste Boud. l. c. *Discina*
venosa Cooke et Sacc. Syll. p. p. est *Peziza Barlaeana* Bres. —
Syll. XVI, p. 703.

5. *Discina maturescens* (Boud.) Sacc. — Syll. XI, p. 395 (imperfecte 5378
descripta), *Disciotis maturescens* Boud. Bull. Soc. Mycol. Fr. (1891)
p. 214, t. XV, f. 1. — Ascomatibus primum cupulatis dein appla-
natis, subimmarginatis, integris, 3,5-4 cm. latis, brunneo-badiis,
extus pallide cinereo-rufescentibus, crassiusculis, carne pallida, di-
sco sæpe undulato; ascis cylindraceis, operculatis, 400 \times 20-23, ad
basim paullo tenuatis, octosporis, paraphysibus simplicibus v. ad
basim divisis, septatis, filiformi-clavulatis, 7-10 μ . cr., fuscis, intus
granulosi; sporidiis ellipsoideis, hyalinis aut vix ochraceis, levi-
bus, ad apices sæpius granulis plasmaticis extus coronatis, 22-25 \times
12-13.

Hab. ad terram argillosam pr. Nizza (BARLA). — Var. *fulve-*
scens Boud., Ic. Mycol II, t. 256 bis, Discom. d' Europe p. 42. —
A typo nonnisi colore fulvescente dignoscenda. — In Gallia.

6. *Discina australica* Cooke, Austral. Fungi (1892) p. 255, t. XXI, 5379
f. 176. — Ascomatibus cupuliformibus, majusculis, 5-10 cm. latis,
dein expansis, glabris, ochraceis, in stipitem brevem crassum radi-
culosum supra attenuatis; disco concolori; ascis sporidiisque adhuc
ignotis.

Hab. ad terram, Victoria Australiæ.

DETONTIA Sacc. — Syll. VIII p. 105, XIV p. 747.

1. *Detonia Rouastiana* (Boud.) Sacc. et Trav. — Syll. XIX, p. 563. — 5380
Plicaria Rouastiana Boud., Icon. Mycol. t. II, pl. 303 (1906), Hist.
et Classif. Discomyc. Europe (1907) pag. 50. — Media, 2,5-3 cm.
lata, sessilis, tota fulvo-purpurascens, subtus pallidior verruculosa,
hymenio e cupulari applanato dein convexo, undulato, margine

sublobato; ascis cylindrico-clavatis, ad basim subattenuatis, hyalinis v. pallide fuscescentibus, octosporis, $250-300 \approx 15-16$; paraphysibus ad apicem crassioribus, septatis, fuscescentibus, sæpe gelatina tectis, $7-8 \mu$. cr.; sporidiis perfecte sphaericis, intus parce granulosis, hyalinis aut pallide fuscescentibus.

Hab. ad terram sabulosam in silvis Coniferarum, Lyon Galliae (ROUAST).

2. *Detonia albida* Rick, Broteria V (1906) pag. 29. — Ascomatibus 5381
intus extusque albidis, 2 mm. latis, extus tenuiter tomentosis; ascis $180 \approx 16$; sporidiis globosis 15μ . diam., episporio glabro; paraphysibus filiformibus.

Hab. ad terram, Rio Grande do Sul Brasiliæ.

GALACTINIA Cooke — Syll. VIII p. 106, XI p. 395, XIV p. 748, XVI p. 708.

1. *Galactinia Cornui* Boud., Icon. Mycol. t. II, pl. 299 (1906), Hist. et 5382
Classif. Discom. Europe p. 49 (1907). — Media, 2-3 cm. lata, badio-purpurea, subtus dilutior et minute verruculosa, sessilis, applanata, margine subdenticulato; ascis octosporis, operculatis, cylindræis, $300-350 \approx 15-20$, jodo cærulescentibus; paraphysibus ad apicem vix clavatis, fusco-badiis, septatis, $8-9 \mu$. cr.; sporidiis ovatis aut ovato-ellipsoideis, sæpe acuminatis, extus verruculosis, intus guttula oleosa sæpe evanescente, $20-23 \approx 7-9$, fulvescentibus.

Hab. ad terram in calidario, Parisiis Galliae (M. CORNU). —

Phæop. apiculatæ affinis sed differt statura et ceteris notis.

2. *Galactinia Luisieri* Torrend, Bull. Soc. portugaise Sc. Nat. III, 1 5383
(1909) p. 5 (extr.). — Minor v. media, primum cupularis 6-8 mm. lata, demum expansa, 1-3 cm., intus nigra, extus pallidior, imo ad basim albo-grisella, furfuracea v. granulosa, margine æquali, fracta lac albo-cæruleum exsudans; ascis elongato-cylindræis, ad basim vix attenuatis, octosporis, $280-300 \approx 13-17$; paraphysibus hyalinis, gracilibus, subramosis, apice incrassatis, ibique $4-5 \mu$. cr., jodo apice cærulescentibus; sporidiis ovoideis, hyalinis, levibus, maturitate minute verrucosis, 2-guttulatis, $16-18 \approx 4-5$.

Hab. ad terram graminosam prope rivulum, Serra d' Ossa, Villa Viçosa Lusitaniæ. — *Gal. badio-fuscae* et *Gal. saniosæ* affinis.

3. *Galactinia badio-fusca* Boud., Icon. Mycol. t. II, pl. 297 (1906) 5384
Hist. et Classif. Discomyc. Europe (1907) pag. 48. — Media aut minuta $0,5-1,5$ cm. lata, sessilis, badio-fusca, extus pallidior, granulosa, margine minute granulato, ascomatibus primo concavis

dein applanatis, fractis lac albo-cæruleum sudantibus; ascis elongato-cylindraceis ad basim vix attenuatis, octosporis, pallide fuliginosis, 300-320 \times 12-17; paraphysibus hyalinis, septatis, ad apices subincrassatis, 6-7 μ . cr., epithecio gelatinoso sæpe tectis; sporidiis perfecte ovoideis, hyalinis, extus crebre verrucosis, intus guttula unica media rarius bi-aut tridivisa donatis, 13-15 \times 9-10; carne fusca lactescente.

Hab. ad terram in silvis, Montmorency, Gallia. — *Gal. saniosæ* affinis sed differt statura majori et sporidiis latoribus magis minute verrucosis.

PYRONEMA Carus — Syll. VIII p. 107, XI p. 395, XVIII p. 22.

1. *Pyronema rugosum* Pat. in Doass. et Patouill. Champ. n. 43, Revue Mycol. III, n. 12 (1881) p. 11 et IV (1882) t. 25, f. 8. — 5385
Ascomatibus convexis, minutis, 1 mm. diam, confluentibus, extus eximie areolato-rugosis, læte rubris, siccis rubro-aurantiacis, in mycelio albo membranaceo-connexo et subsecedente nidulantibus; hypothecio parco rubente; ascis tereti-clavatis, deorsum breviter tenuato-stipitatis, octosporis, filiformi-paraphysatis; sporidiis ovoideo-ellipsoideis utrinque obtuse rotundatis, oblique monostichis, 1-guttulatis, hyalinis.

Hab. in muris nondum plane exsiccatis, Poligny Gallia. — A *Pyronema omphalode* dignoscitur, teste auctore, sporidiis crassioribus et, ut videtur, superficie ascomatis areolato-rugosa. Forte *P. hæmastigmati* affinius, sed mycelium in hoc minus evolutum.

2. *Pyronema amaniense* P. Henn., Engl. Jahrb. XXXVIII (1905) p. 116. — 5386
Ascomatibus dense gregariis, cupulatis, ceraceo-carnosis, extus pallidis, margine aurantiis, disco flavido concavo, c. 1-1,5 mm. diam., hyphis flavide brunneolis v. hyalinis, ramosis, septatis, granulatis, usque ad 15 μ . cr. circumdati; ascis cylindraceo-clavatis, vertice rotundato-obtusis, octosporis, 120-140 \times 9-11, paraphysibus filiformibus, guttulatis, hyalinis 2,5 μ . cr., apice hamatis et usque ad 4 μ . cr.; sporidiis monostichis, ellipsoideis, obtusis, eguttulatis, hyalinis, 12-16 \times 5-7.

Hab. in areis carbonariis, Amani Ost-Usambara Africae centr.

3. *Pyronema tapesioides* Rehm — Syll. XI, p. 396 — var. *saccharinum* Rehm, Ascom. exsicc. n. 1732, Ann. Myc. V (1907) p. 467. — 5387
Ascomatibus primum glaucis subglobosis rubro-flavidis demum late apertis, disco flavo-albido 0,3-2,5 mm. lat.; excipulo parenchymatico e cellulis rotundatis v. fusoideis, 40 \times 30, hyalinis; ascis

cylindræis, rotundatis, c. $150 \times 7-8$, octosporis; sporidiis elongatis, rotundatis, levibus, unilocularibus, $15-18 \times 9$, monostichis; paraphysibus filiformibus 3 μ . cr., supra usque ad 6 μ ., hyalinis.

Hab. in superficie limi (sedimenti) in saccharificio, Schönowitz prope Zülz Silesiæ (BUCHS).

BARLÆINA Sacc. — Syll. VIII p. 111, X p. 5, XI p. 396, XIV p. 748, XVI p. 710, XVIII p. 23.

1. *Barlæina livida* (Rehm) Sacc. et Trav. — Syll. XIX, p. 139 — 5388
Crouania livida Rehm in Hazsl. Magyar Discom. (1886) p. 262, t. VII, f. 26. — Ascomatibus sessilibus scutellatis, glabris, obtuse marginatis, lividis; ascis cylindræis, apice rotundatis deorsum longe tenuato-stipitatis; paraphysibus filiformi-clavatis obvallatis, octosporis; sporidiis monostichis perfecte sphaericis, levibus, crassiuscule tunicatis, $14-15 \mu$. diam., hyalinis.

Hab. ad terram in Hungaria (LOJKA).

2. *Barlæina subcærulea* (Kirschst.) Sacc. et Trott., *Barlæa subcærulea* 5389
Kirschst., Verh. Bot. Ver. Brandenb. XKVIII (1906) p. 46. — Ascomatibus solitarie insidentibus, applanato-depressis, orbicularibus, acutiuscule marginatis, pallide cyaneis, siccis flavescentibus, 3-5 mm. diam., ceraceis; ascis cylindræis, supra rotundatis vel subtruncatis, operculatis, $140-170 \times 10$, breviter pedicellatis, octosporis; sporidiis monostichis, hyalinis, globosis, crebre verruculoso-aculeatis, centro uniguttulatis, 8-9 μ . diam.; paraphysibus filiformibus, continuis, supra sæpe subcurvulis, hyalinis.

Hab. ad terram herbosam prope Gross-Behnitz Germaniæ.

3. *Barlæina dictydiola* (Boud.) Sacc. et Trav. — Syll. XIX, p. 139 5390
— *Lamprospora dictydiola* Boud., Icon. Mycol. t. II, pl. 403 (1906) Hist. et Classif. Discomyc. Europe (1907) p. 68. — Minuta, 3-5 mm. lata, aurantiaca, margine lato et dentato pallidiore; ascis octosporis, cylindricis, $230-300 \times 13-15$; paraphysibus aurantiacis ad apicem vix incrassatis, ad basim ramosis et septatis, jodo tinctis, 6-7 μ . crassis; sporidiis perfecte rotundatis, albis, extus minute et tenuissime reticulatis, intus guttula oleosa crassa sæpius unica repletis, 15-16 μ . latis.

Hab. ad muros muscoso, Montmorency, Gallia. — Sporidiis minute reticulatis distincta.

4. *Barlæina Crec'hqueraultii* (Cr.) Sacc. — Syll. VIII, pag. 113 — var. *macrantha* Boud., Icon. Mycol. t. II, pl. 405 (1906), Hist. et

Classif. Discom. Europe p. 69 (1907) [*Lamprospora*]. — A typo differt sporidiis spinulis validioribus tectis.

Hab. ad terram in Gallia.

5. *Barlæina Strasseri* Bres. in Strasser, III Nachtr. Pilz. Sonntagb. 5391 (Verhandl. zool. bot. Gesell. Wien (1905) p. 613). — Ascomatibus carnosus, dense gregariis, sessilibus, concavo-applanatis, glabris, vivide etiam in sicco cinnabarinis, 2-4 mm. latis; ascis cylindraceutis, stipitatis, 180-200 \times 10-11, jodo haud tinctis; paraphysibus filiformibus, 1 μ . latis, apice curvatis, haud incrassatis; sporidiis globosis v. subglobosis, levibus, 8-10 μ . diam. vel 10 \times 9.

Hab. in areis carbonariis jam vetustis ad muscos v. ad terram in silvis Montis Sancti, Sonntagberg Austriae inf. — A *B. Polytichii* Sch., *cinnabarina*, *carbonaria* diversa; cum *Barlæina Rickii* Rehm, forsitan conjungenda.

6. *Barlæina carbonicola* (Boud.) Sacc. et Trav. — Syll. XIX p. 138 5392 — *Lamprospora carbonicola* Boud., Icon. Mycol. t. II, pl. 401 (1906), Hist. et Classif. Discomyc. Europe (1907) p. 68. — Minuta, aurantiaca, 1,5-3 mm. lata, margine late denticulata, subtus dilutior; ascis clavatis, octosporis, amplis, ad basim sensim attenuatis, 210-250 \times 15-19; paraphysibus septatis, aurantiacis, ad apicem paululum incrassatis, 7-8 μ . cr., simplicibus aut ad basim divisis; sporidiis albis, levibus, perfecte sphaeroideis, intus guttula oleosa crassa in maturis unica, in junioribus granulis plus minusve numerosis comitata, 13-15 μ . cr.

Hab. ad terram muscosam in areis carbonariis, Montmorency Gallia. — A speciebus affinis differt sporidiis sphaeroideis levibus.

7. *Barlæina læterubra* Rehm, Ascom. Amer. bor., Ann. Myc. v. III 5393 (1905) p. 516 (*Barlæa*). — Ascomatibus sessilibus, gregariis, primitus globoso-clausis, dein patellaribus, irregulariter orbicularibus, distincte marginatis, disco late rubro, extus glabris, pallidius rubescentibus, 1-4 mm. diam., carnosus; ascis cylindraceutis, apice rotundatis, 180-200 \times 12, octosporis, jodi ope nulla; sporidiis globosis, levibus, guttam 1 magnam oleosam includentibus, hyalinis, 10 μ . diam., monostichis; paraphysibus, filiformibus, septatis, ad apicem hamatis, 1,5 μ . cr., hyalinis.

Hab. ad terram, Madison Wisconsin Amer. bor. (HARPER). — A proxima *B. convexella* colore et sporidiis multo minoribus divergens, item a *B. globifera* colore et paraphysibus hamatis.

8. *Barlæina kerguelensis* P. Henn., Deutsche Südpolar-Exped. Bd. 5394 VIII (1906) Extr. p. 8, t. I, f. 11 a-c. — Ascomatibus primo sub-

globosis, dein discoideo-explanatis, carnosulis, coccineis, extus subpallidis, levibus, primo marginatis, 1-2 mm. diam., disco plano coccineo; ascis cylindraceo-clavatis apice obtuso-rotundatis, c. 280-340 μ . long., p. sp. 140-180 \times 18-22, octosporis; paraphysibus basi ramosis, filiformibus, intus aurantio-guttulatis, c. 3 μ . cr., apice 4-8 μ . incrassatis, rotundatis; sporidiis monostichis, globosis, hyalinis, verrucoso-echinatis, c. 17-20 μ ., verrucis obtusis vel acutis c. 4-5 \times 2.

Hab. ad terram muscosam, Kerguelen-Station (E. WERTH). — *Barl. asperellæ* Rehm affinis, a qua differt ascis longioribus, sporidiis verrucoso-echinatis, etc.

HUMARIA (Fr.) Fuck. em. Sacc. — Syll. VIII p. 118, X p. 4, XI p. 396, XIV p. 749, XVI p. 710, XVIII p. 166.

1. *Humaria lacteo-cinerea* Rehm, Ascom. Amer. bor., Ann. Myc. III 5395 (1905) p. 517. — Ascomatibus gregariis, sessilibus, patellaribus, disco irregulariter explanato, repande marginato, margine mox recurvo, irregulari, cinereo-albo, 0,5-2 cm. diam., excipulo glabro, albescente, in stipitem brevissimum subcylindraceum elongato, ceraceis; ascis cylindraceis, apice subtruncatis, 120-150 \times 10-12, octosporis, jodi ope immutatis; sporidiis ellipsoideis, utrinque obtusis, 1-cellularibus, gutta oleosa centrali magna præditis, hyalinis, episorio crasso verrucoso, 12-13 \times 7-8, monostichis; paraphysibus filiformibus, septatis, 3-4 μ ., versus apicem subclavatum 5 μ . cr., hyalinis.

Hab. in aquæductu pineo in calidario, Madison Wisconsin Amer. bor. (HARPER). — Fungus colore albo sporidiisque verrucosis insignis videtur, sed specimina visa senilia.

2. *Humaria lilacina* (Boud.) Sacc. et Trav. — Syll. XIX, p. 880 — 5396 *Aleuria lilacina* Boud., Ic. Mycol. II, t. 277, Discom. d'Europe, p. 45. — Media, cm. 1,5-4,5 lata, cupularis, dein applanata, extus glabra, tantum ad marginem lutescentem minutissime furfuracea, pallide cinereo-purpurascens aut lilacina, disco saturatiore dein expallente; ascis cylindricis, octosporis 250-300 \times 12-14; paraphysibus tenuibus, apice vix incrassatis, septatis, 4-5 μ . cr., hyalinis; sporidiis ellipsoideis intus non guttulatis et granulis externis utrinque positis denique secedentibus ornatis, 13-15 \times 8-9.

Hab. ad terram locis aridis in Gallia meridionali (ROLLAND). — Ab affini *H. violacea* probe distincta.

3. *Humaria livida* (Lamb.) Sacc et Trav. — Syll. XIX, p. 880 — 5397
Leucoloma livida Lamb. Fl. Mycol. Belg. Suppl. I, p. 318, f. 63 a.
 — Gregaria, conferta, carnosae, minuta, plano-scutellata, cinereo-livida, margine integro v. irregulariter lobato; sporidiis ellipsoideis, 24×12 , 1-guttulatis, hyalinis.

Hab. ad lapides, Mæstricht Hollandiæ.

4. *Humaria olivaceo-fusca* Rehm, Contr. Mycol. Hung. (Növ. Közl. 5398 (1905) p. 6). — Ascomatibus sessilibus, primitus fere subimmersis, globoso-clausis, dein urceolatis, demum margine crasso plus minusve irregulariter inciso, excipuli contextu parenchymatico, glabris, olivaceo-fuscis, carnosis, 1 cm. diam.; ascis subclavatis, apice rotundatis, 150×20 , octosporis, jodo immutatis; sporidiis fusoides, 1-cellularibus, guttam oleosam magnam includentibus, levibus, hyalinis, monostichis, $20-22 \times 10-12$; paraphysibus filiformibus, septatis, 2 μ ., versus apicem sensim 5 μ . cr. ibique flavidulis.

Hab. in loco eluto, Berencsfalu, prope Selmeczbánya Hungariæ (KMET). — Sporidiis fusiformibus a ceteris *Humariæ* speciebus olivaceo-fuscis terrincolis diversa.

5. *Humaria humosa* Fr. — Syll. VIII, pag. 120 — var. *anthracobia* 5399 Boud., Hist. et Classif. Discomyc. Europe (1907) p. 67. — A typo differt statura semper minori et habitatione.

Hab. in areis carbonariis, Montmorency et silva Carnelle Gallia.

6. *Humaria schemnitzensis* Rehm, Contr. Mycol. Hung. (Növ. Közl. 5400 (1905) p. 6). — Ascomatibus sessilibus, mox irregulariter explanatis, suborbicularibus, dein repandis, crasse marginatis, nodulose brevissime stipitatis, excipulo glabro, crasse parenchymatice contexto, fusco-aurantiacis, carnosis, 0,5-1,5 cm. diam.; ascis cylindraceutis, apice rotundatis, longissimis, 10 μ . cr., octosporis, jodo immutatis; sporidiis oblongis, utrinque obtusis, 1-cellularibus, haud guttatis, levibus, $10-12 \times 6-8$, monostichis; paraphysibus filiformibus, 2,5 μ . ad apicem 3-4 μ . cr., septatis, hyalinis.

Hab. ad terram in silva abietina, Hodrusbánya prope Selmeczbánya (KMET). — Quoad colorem similis *H. nemorosæ*, quæ autem nuper non explorata (cfr. Rehm, Discom. p. 955).

7. *Humaria wisconsiensis* Rehm, Ascom. Amer. bor., Ann. Myc. III 5401 (1905) p. 517. — Ascomatibus gregariis, sessilibus, globoso-clausis, mox patellaribus, orbicularibus, disco distincte marginato, plano, aurantiaco-flavo, haud cyathoides, extus glabris, pallidioribus, hyphis albidis, substrato affixis, ceraceis, 0,5-5 mm. diam.; ascis cla-

vatis, apice rotundatis, $40-45 \times 5-6$, octosporis, jodo immutatis; sporidiis ellipsoideis, 1-cellularibus, interdum subcurvatis, hyalinis, $6-7 \times 3$, distichis; paraphysibus filiformibus, septatis, $2-2,5 \mu$. cr., haud clavatis, flavidulis; excipulo crasso, parenchymatico, versus marginem pseudoprosenchymatico.

Hab. ad calamos putridos Caricis, Blue Mountains Wisconsin Amer. bor. (HARPER). — *Humaria flavotिंगens* B. et Br. (Cfr. Cooke Mycogr. f. 38) imprimis ascomatibus cyathiformibus mycelioque flavo divergit.

8. *Humaria Boudieri* (Quél.) Sacc. — Syll. VIII, p. 146 — var. *spadicea* Boud. Icon. Mycol. t. III, pl. 446, Histoir. et Classif. Discom. Europe p. 96 (1907) (*Discinella*). — A typo differt colore pallidiore minime purpurascenti.

Hab. ad terram in silvis, Beauchamp Galliae.

9. *Humaria furfurella* (Starb.) Sacc. et Trav. — Syll. XIX, p. 878 — 5403
Melachroia furfurella Starb., Ascom. Schwed. Chaco-Cordill. Exp., Arkiv f. Bot. Bd. V (1905) p. 3, fig. 3 a-c. — Ascomatibus sparsis vel nonnullis gregariis, superficialibus, primo cylindraceo-sphaeroideis vel subturbinatis, mox expansis, cupulatum patellatis, late centraliter ad matricem fixis, excipulo pallide furfuraceo, margine orbiculari, acuto, perpallum crenulato, totis cremeis vel incarnatis, disco interdum obscuriore, pellucidis, contextu cartilagineo-gelatinoso, hypothecii intricato, excipuli porrecto, 2-8 mm. diam.; ascis octosporis, clavatis, sursum rotundatis, longissime pedicellatis, p. sp. $105-140 \times 12-14$; pedicello æquilongo vel longiore; sporidiis recte vel sæpe oblique vel fere transversim monostichis, ellipsoideis, interdum inæquilateralibus, guttulis duabus ornatis, lenissime colore roseo tinctis, $19-20 \times 10-11,5$; paraphysibus filiformibus, fere ad medium furcatis, sursum vix clavulato-incrassatis, $2-2,5 \mu$.

Hab. in ramulis mucidis, Tatarenda Gran Chaco, Bolivia. — Sicca ascomata varie contracta, extus ochraceo-albida, furfuracea, rugoso-plicatula, hymenio obscuriore, sæpe fulvo-rubescente; hyphæ breves, flexuosæ, sæpe globuloso-vel ovato-inflatae e pariete exeuntes furfurem excipuli formant.

10. *Humaria nitida* (Boud.) Sacc. et Trav. — Syll. XIX, p. 881 — 5404
Anthracobia nitida Boud., Icon. Mycol. t. II, pl. 388 (1906), Hist. et Classif. Discomyc. Europe (1907) p. 65. — Minuta 1,5-3 mm. lata, rubro-aurantiaca, subtus pallidior; ascomatibus marginatis, extus pilis brevissimis, granulatim fasciculatis, septatis, ad apicem

brunneis, 60-80 \times 15, hymenio nitide aurantiaco-rubro; ascis cylindraceis, octosporis, 220 \times 15; paraphysibus simplicibus, ad apicem clava 8-10 μ . cr. terminatis, protoplasmate aurantiaco, jodo virescente repletis; sporidiis elliptico-oblongis, levibus, 2-guttulatis, 18-19 \times 8-9.

Hab. ad terram in areis carbonariis, Montmorency Gallia. — *Pyronem.* (Anthr.) *melalomatæ* affinis sed differt statura minori, colore magis rubro, paraphysibus magis clavulatis, sporidiis brevioribus sed latioribus.

11. *Humaria flavens* Feltg., Vorst. Pilzfl. Luxembg. Nachtr. IV (1905) 5405 p. 25. — Ascomatibus gregariis, liberis, patellaribus, 2-3 mm. latis; disco concavo v. subdepresso, udo pallide flavo, sicco aurantiaco, flocculoso marginato; extus concolori subfurfuraceo; ascis cylindraceis, supra rotundatis vel depressis, J-, basi longe angustatis, octosporis, 140-175 \times 10-14, p. spor. 60-75 μ . long., paraphysibus filiformibus apice subclavatis vel subcapitellatis, 3-6 μ . diam., flavidis, guttulado-faretis obsitis; sporidiis monostichis, obtuse ellipsoideis, rectis, extus verrucoso-aculeolatis, unilocularibus, grosse biguttulatis, hyalinis, 8-10 \times 5-6.

Hab. ad terram argillaceam sub radice vetusta, Knaphoscheid Luxemburgia. — *H. flavo-rubenti* Rehm affinis.

12. *Humaria minutula* Pat., Bull. Soc. Myc. Fr. XXIII (1907) p. 84. 5406 — Sparsa v. gregaria, sessilis, minuta, 2 mm. circ. lata, extus supraque carnea, hymenio saturatiore, primo cupularis dein explanata subconvexa, extus levigata, margine obtuso integro, carne pallidiore; ascis operculatis, cylindraceis, 250 \times 15, octosporis, J-; sporidiis ovoideis, monostichis, hyalinis, levibus, majusculis, 15-21 \times 11-14, intus obscure biguttulatis; paraphysibus numerosis, septatis, vix incrassatis (4 μ .), fere hyalinis, non granulosis.

Hab. ad terram in fragmentis ligneis putrescentibus, Africa occidentali.

13. *Humaria xanthomela* (Pers.) Quél. — Syll. VIII, p. 128 — var. 5407 *americana* Rehm, in Ann. Mycol. III (1905) p. 230 (*Melachroia*). — Ascomatibus ad basim plus minusve contractis, inde peltiformibus.

Hab. in foliis dejectis infossis Pinorum, Tacoma Park, Washington Amer. bor. (SHEAR).

14. *Humaria globoso-pulvinata* Cressl., Naturalist (1908) pag. 216. — 5408 Ascomatibus gregariis v. sparsis, subrubro-carneis, firmulis, globosis, tum globoso-pulvinatis, puncto centrali affixis, carnosus, 1-1,25

mm. lat., 0,5-0,75 mm. cr., extus glabris, carne molli, hyphis excipuli intertextis, ramosis, septatis, 3-5 μ . cr., cellulis corticalibus subglobosis, 7-8 μ . diam.; ascis late cylindraceo-clavatis, sæpe curvatis, 140-150 \times 16-18, apice truncato-rotundato, deorsum tenuatis, octosporis; sporidiis oblongo-ellipsoideis, eguttulatis, continuis, hyalinis, levibus, 12 \times 8; paraphysibus filiformibus, profusis, interdum ramosis, 3 μ . cr., plasmate granuloso, subrubro.

Hab. in sedimento dolii tinctorii inusitati, Hebden Bridge prope Halifax Britanniae. — Nonnullis notis ad *Ascophanum* nutat sed asci non operculati, nec emergentes etc.

SOLANELLA J. Vanha in Monathefte für Landwirtsch. (1910) p. 4 (extr.) (Etym. *Solanum*, cui noxia). — Ascoma epigæum, ex mycelio subterraneo filiformi, septato nascens, initio globulosum, clausum, dein apertum et dilatatum, excipulo subnullo, h. e. ex setulis fusoideis sursum cuspidatis, septatis tantum formato; hypothecio tenui. Asci cylindracei, paraphysati, octospori. Sporidia ellipsoidea, continua, hyalina. — Probabiliter *Humaricæ* v. *Psilopezicæ* nimis affine genus.

1. *Solanella rosea* J. Vanha, l. c. pag. 4-6, tab. I et II. — Chara- 5409 cteres generis. Ascوماتa, rosea, molliuscula, 0,5-1,2 mm. diam.; setulae fusoideo-ampulliformia, longe acute cuspidata, 3 4-septata, ascos paullo superantia; asci breve stipitati, apice rotundati, 160 \times 11-12; sporidia ellipsoidea utrinque rotundata, 16-18 \times 10, farcta, subhyalina.

Hab. in agris, ubi *Solanum tuberosum* colitur et cui, teste auctore, morbum dictum *Kräusel- oder Rollkrankheit* affert, in Moravia.

ASCODESMIS v. Tiegh. — Syll. VIII p. 824, XVIII p. 29.

1. *Ascodesmis echinulata* Bainier, Bull. Soc. Myc. France XXIII 5410 (1907) p. 139, tab. XX (absque diagn.). — Ab *Ascod. nigricante* v. Tiegh. differt sporidiis ovoideis, 11 \times 8 \times 4, exosporio semper echinulato numquam reticulato.

Hab. in fimo in Gallia.

2. *Ascodesmis reticulata* Bainier, Bull. Soc. Mycol. Fr. XXIII (1907) 5411 p. 137, tab. XIX (absque diagnos.). — Ab *Ascodesmi nigricante* v. Tiegh. differt sporidiis majoribus, 15 \times 11, exosporio reticulatim prominente obscuriore.

Hab. in fimo canino et bovino in Gallia.

SARCOSCYPHA (Fr.) Sacc. — Syll. VIII p. 153, XI p. 398, XIV p. 753, XIV p. 715, XVIII p. 30.

1. *Sarcoscypha concatenata* Rick, Broteria V (1906) p. 32. — Asco- 5412
matibus breviter stipitatis, 8 mm. latis, extus albis, sericeis, obiter
venosis, intus avellaneo-roseis, carne sicca; ascis longissimis, 10-
12 μ . latis; sporidiis 18-30 μ . long., 10 μ . latis, in ascis plerumque
ellipsoideis, extra ascum cylindraceis, biguttulatis, levibus, mucro
hyalino obvallatis, in asco inter se concatenatis, apicibus trunca-
tis; paraphysibus filiformibus, hyalinis.

Hab. in ramo Pini, Rio Grande do Sul Brasiliæ.

2. *Sarcoscypha dawsoniensis* Peck, Bull. Torr. Bot. Club, XXXIII 5413
(1906) p. 220. — Ascomatibus cupulatis, 1-2 cm. latis, confertis
v. cæspitosis, sessilibus v. radicatis, basi sæpe inæqualibus v. sul-
catis, irregularibus, extus pruinosis v. tomentosulis, pallidis basi
albidis; disco rubro v. aurantiaco, sæpe plicato-rugoso; ascis cy-
lindraceis, 200-280 μ . long.; sporidiis monostichis, ellipsoideis, le-
vibus, 20 \approx 10; paraphysibus angustis, filiformibus, apice subin-
crassatis.

Hab. ad terram infra plantulam musci *Leptobryii* pirifor-
mis, West Dawson Yukon Terr., Amer. bor. (E. B. STERLING).

3. *Sarcoscypha javensis* v. Höhn., Stzb. k. Ak. d. Wiss. Wien, CXVIII 5414
Abt. I (1909) p. 395. — Ascomatibus molli-carnosis, plerumque
paucis cæspitosis, 3-4 mm. latis, scutellatis, in pedicellum 0,5-1
mm. longum angustatis, disco pallide rubro-carmineo, extus levibus
v. longitudinaliter rugulosis, e pallide rubido albidis; hypothecio
300-350 μ . crasso, fibroso-plectenchymatico, excipulo transverse
marginato, 180 μ . crasso; ascis cylindraceis, octosporis, 230 \approx 10;
paraphysibus filiformibus e basi semel v. bis ramosis, 1,5 μ . cr.;
sporidiis recte monostichis, cylindraceo-ellipsoideis, plerumque u-
trinque obtusulis, eguttulatis, 16-18 \approx 8. J-.

Hab. in ligno putri in silvis primævis Tjibodas in ins. Java. —
Sarc. pusioni B. et C. affinis.

MACROPODIA Fuck. — Syll. VIII p. 158, XVIII p. 31.

1. *Macropodia Dubaleni* (Boud.) Sacc. et Trott., *Cyathipodia Dubaleni* 5415
Boud., Hist. et Classif. Discomyc. Europe (1907) p. 39. — Pro
genere major, 5-10 cm. alta, receptaculo non lobato nec plicato,
cupulæformi dein repando et subconvexo; hymenio ochraceo-pal-
lido aut ochraceo-cinerascente, subtus albo aut albedo, levi; stipite
cylindrico, fistuloso, elongato, gracili, deorsum incrassato et com-

presso, sæpe ad basim lacunoso, colore saturatiore et minutissime albido-puberulo; paraphysibus elongatis, septatis, ad apices crassioribus et nebulosis, 7-10 μ . crassis; ascis octosporis, cylindraceutis, 300-330 \times 18-20; sporidiis ellipsoideis, intus guttula media crassa minoribus adjunctis repletis.

Hab. ad terram argillaceam in silvis, Isle-Adam et Saint-Sever Landes, Gallia.

2. *Macropodia gracilis* Hazsl. Magyar. Discom. p. 276, t. II, f. 34 5416 (1886). — Longe stipitata, glabra; cupula subhemisphærica, concava, subcartilaginea, grisea, stipite cylindrico, 3 cm. longo, 2 mm. cr., gracili; ascis et sporidiis ut in *Macr. macropode*.

Hab. ad terram inter muscos in Hungaria.

PLECTANIA Fuck. — Syll. VIII p. 163, XVI p. 716, XVIII p. 32.

1. *Plectania gelatinosa* Pat., Bull. Soc. Myc. Fr. XXIII (1907) p. 70. 5417

— Ascomatibus hemisphæricis, regularibus, 15 mm. circ. diam., margine integro crasso recto præditis, extus leniter floccosis nigro-violaceis; disco concavo, levi, olivaceo; stipite cylindrico 1 cm. long., 5 mm. cr., basi pilis sparsis brunneis elongatis, septatis, 5 μ . cr. prædito; trama gelatinosa, hyalina, inflata, ex pilis incolouribus, ramosis, 3-4 μ . cr. constituta; ascis apice truncatis basi elongatis, attenuatis, gracilibus, flexuosis, 300 \times 16, octosporis; J-; paraphysibus copiosis, bacillaribus, ramosis, septatis, apice coloratis et 3-4 μ . cr.; sporidiis monostichis, ovoideis, levibus, 10-12 \times 8.

Hab. ad lignum emortuum in vallis Djirin Indo-Chinae.

LACHNEA (Fr.) Gill. — Syll. VIII p. 166, X p. 5, XIV p. 754, XVI p. 716, XVIII p. 76.

1. *Lachnea folliculata* v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII, 5418

Abt. I (1909) p. 396. — Ascomatibus patellariformiter expansis, extus rubro-brunneis, disco sordide rubro-miniato, 0,5-3 cm. latis, carnosus, parenchymaticis; setulis rubro-brunneis extus brevioribus, obtusis, ad marginem pluries seriatis, 20-25-septatis, usque ad 1,3 mm. long., acutis, basi usque ad 40-48 μ . cr., tunica usque ad 9 μ . cr. præditis, basi sæpe appendice radiceformi auctis; ascis cylindraceutis, basim versus sensim stipitiiformi-angustatis, octosporis, 250-280 \times 16; paraphysibus numerosis extus mucosis, 2-3 μ . cr., supra globosis, hyalinis et usque ad 9 μ . cr.; sporidiis monostichis, hyalinis, ellipsoideis, irregulariter obtuse verruculosis (verruccis 2 μ . latis), 24-25 \times 13-16, utrinque appendicutatis, processibus utrinque

acutis lateraliter adpressis et apicibus conoideo-folliculatis; sporidiis cum folliculis 50 μ . long. J-.

Hab. ad tabulas udas Tjibodas in ins. Java.

2. *Lachnea Boudieri* Sacc. et Trott., *Sepultaria Boudieri* Torrend 5419
Bull. Soc. portugaise Sc. Nat. III, 1 (1909) p. 6 (extr.). — Minor v. media, 7-15 mm. lata, 1-2 cm. alta, primum hypogæa, globosa, diu clausa, deinde ore epigæo et constricto dehiscens, demumque sæpius in lacinias plures fissa, saltem in major. speciminibus; pilis longissimis 6-7 μ . cr., septatis, interdum ramosis, stramineis vel pallide fusciculatis ad basim vestita; disco urceolato albicante, apice granuloso v. furfuraceo, ad basim piloso; ascis breve stipitatis, cylindraceis, 210-220 \times 15-17; sporidiis ellipsoideis, 1-guttulatis, 23-25 \times 14-15; paraphysibus simplicibus linearibus ad apicem breviter incrassatis.

Hab. ad terram argillaceam in quercetis, Villa Viçosa Lusitaniæ. — Affinis *L. arenosæ*.

3. *Lachnea rufo-brunnea* P. Henn., in Voeltzkow Reise Ostafrika III 5420 (1908) p. 32, tab. III, f. 28. — Ascomatibus gregariis, cupulato-explanatis, pallide brunneis, ad marginem pilosis, c. 5-8 mm. diam., disco rufo-brunneo, levi, pilis simplicibus, rigidis, atro-castaneis, septatis, acutis vel obtusiusculis, 300-500 \times 20-40; ascis cylindraceis, obtuso-rotundatis, octosporis, 180-220 μ . long., p. sporif. 100-150 \times 10-14; paraphysibus filiformibus c. 2 μ . cr., septatis, ad apicem clavato-incrassatis, hyalinis, 5-7 μ . cr.; sporidiis monostichis, ellipsoideis, hyalinis, aculeato-verrucosis, 13-18 \times 8-12.

Hab. gregaria ad terram Fénérive Madagascar. — *L. Chaeteri* (Smith) affinis sed differt colore rubro-brunneo, setulis etc.

4. *Lachnea Chelchowskiana* Rouppert, Bull. Ac. Sc. Cracovie (1908) 5421 p. 650. — Ascomatibus sessilibus, dispersis v. gregariis, 5-6 mm. latis, interdum per paria inter se conjunctis et gemellis similibus, superficie hymenii brunneo-lutea, pilis brunneo-luteis, septatis, 240 μ . long., 4-6 μ . latis circumdata; ascis cylindraceis obtusis, octosporis, 130-160 \times 12-14, jodo non cærulescentibus, paraphysibus filiformibus, hyalinis, 2-3 μ . cr.; sporidiis ellipsoideis, hyalinis, 16-18 \times 8-12.

Hab. in terra argillacea ad Raciazek prope Ciechocinek Poloniæ. — *Lachn. cinerellæ* Rehm proxima, differt ascomatibus majoribus, ascis minoribus, pilis longioribus sed minus crassis, colore hymenii atque excipuli.

5. *Lachnea Coccoes* (Pat.) Sacc. et Trott., *Ciliaria Coccoes* Pat., Bull. 5422

Soc. Mycol. de France XXII (1906) p. 52. — Sessilis, carnosa, primitus hemisphærica demum applanata, 2-3 mm. diam., intus albida v. livida, extus brunneola, pilis brunneo-flavidis, septatis usque ad 0,5 mm. longis obsessa; ascis cylindraceis, longe attenuato-stipitatis, 8-sporis, 250×15 ; sporidiis monostichis, ovoideis, grosse obtuseque verrucosis, $10-20 \times 10$; paraphysibus linearibus, septatis, apice clavato-inflatis, hyalinis.

Hab. ad truncos putridos Cocœs nuciferae, Taravao Polynesia. — *Lachnea livida* (Sch.) affinis, differt sporidiis grosse verrucosis, pilis longioribus acutis etc.

6. *Lachnea Didymodontis* P. Henn., Deutsche Südpolar-Exped. Bd. 5423 VIII (1906) Extr. p. 7, taf. I, fig. 8 a, e. — Ascomatibus caespitosis, primo subgloboso-clausis, dein subhemisphaerico-cupulatis, 2-3 mm. diam., brunneolis, extus margineque pilosis, pilis flexuosis, septulatis, apice obtusis v. acutiusculis, hyalinis, usque ad $250 \times 4-6$; disco concavo, levi, concolori v. brunneo-fusco; ascis clavatis, apice rotundatis, octosporis, $120-180 \times 15-20$; paraphysibus densis conglutinatis, filiformibus, $3-3,5 \mu$. cr., apice subclavatis, $4-5 \mu$. incrassatis, brunneolis; sporidiis oblique monostichis v. subdistichis, ellipsoideis v. fusoides, grosse 1-guttulatis, $15-18 \times 10-12$, episporio hyalino, primo sublevi, dein verrucoso-reticulato, angulato.

Hab. ad rupes inter species *Didymodontis*, Kerguelen-Station (E. WERTH).

7. *Lachnea Torrentis* Rehm, Ascom. exsicc. n. 1724, Ann. Myc. V 5424 (1907) p. 212. — Ascomatibus sparsis, sessilibus, primum globoso-clausis, dein late apertis, disco flavescentibus, 1-2 (raro -5) mm. latis, extus pilis curvulis, acutis, 1-6-septatis, brunneolis, $120-200 \times 15$ tectis; ascis cylindraceis, supra rotundatis, 150×14 , octosporis, jodi ope nulla; sporidiis elongatis, utrinque fortiter rotundatis, unilocularibus, non guttulatis, vix asperulis, hyalinis, $15-18 \times 7-8$, monostichis; paraphysibus filiformibus, supra rubro-purpurascens, usque ad 10μ . cr.

Hab. in sabulosis Sperrbach-Tobel prope Spielmannsau in alpinis Algovia (W. KRIEGER). — A *Lachnea ochroleuca* Bres. ascomatibus magis pilosis, a *L. carneo-sanguinea* Fuck. ascomatibus minoribus, sporidiis minoribus non guttulatis diversa.

8. *Lachnea scutellata* (L.) Gill. — Syll. VIII, p. 173 — var. *apopies-* 5425 *matis* Rehm, Ann. Mycol. VI (1908) pag. 117; Ascom. exsicc. fasc. 41, n. 1755. — A typo differt sporidiis plerumque levibus,

vix guttatis, 12-18 \times 10-12, demum dilutissime flavidulis; paraphysibus usque ad 10 μ . lat., haud guttatis, hyalinis.

Hab. in seminibus fructuum putrescentium in umbrosis prope Seitenstetten Sonntagberg Austriæ inf. (P. STRASSER). — *Apopisma* græce est fæx et vinacea.

9. *Lachnea chrysotricha* Rehm, Ann. Mycol. V (1907) pag. 520. — 5426

Ascomatibus gregariis, primitus globoso-clausis, mox urceolatis, dein explanatis, sessilibus, demum irregulariter complicatis, disco cinereo-flavescente, excipulo dense fusco-tomentoso, ad marginem pilis simplicibus, rectis, acutis, septatis, glabris, dilute aureo-fuscidulis, cellulis ad basim 18 μ . latis, dense aggregatis, 1 mm. longis coronatis, ceterum pilis fuscis 350 \times 12 obscurioribus obtectis; ascis cylindraceis, apice rotundatis, 150 \times 15, octosporis; sporidiis obtuso-ellipsoideis, guttis 2 magnis oleosis repletis, scabriusculis, 1-cellularibus, hyalinis, 18-20 \times 9-10, monostichis; paraphysibus filiformibus, septatis, 2 μ ., versus apicem usque 7 μ . crassis, hyalinis.

Hab. ad ligna putrida, Sailor's Encompment, Mich. Amer. bor. (S. A. HARPER). — *Lach. Woolhopeiæ* et *L. lividæ* nonnullis notis proxima.

10. *Lachnea theleboloïdes* (Alb. et Schw.) Gill. — Syll. VIII, p. 179 5427

— var. *saccharata* Rehm, Ascom. exsicc. n. 1733, Ann. Myc. V (1907) p. 468. — Ascomatibus plerumque sparsis, primum globoso-clausis dein apertis flavescentibus, 0,5-3 mm., siccis convolutis; excipulo parenchymatico brunneo, margine pilis rectis, acutis, brunneis, septatis. 180 \times 15 tecto; ascis cylindraceis 180 \times 15, J -, octosporis; sporidiis elongatis, rotundatis, non guttulatis, levibus, hyalinis, 15 \times 8, monostichis; paraphysibus filiformibus, septatis, 2,5-3 μ . cr., supra rotundato-clavatis usque ad 10 μ . cr., hyalinis.

Hab. in superficie limi (sedimenti) in saccharificio Schönowitz prope Zülz Silesia (BUCHS).

11. *Lachnea subcrinita* Rehm, Ann. Mycol. VII (1909) p. 535. — 5428

Ascomatibus sessilibus, gregariis, primitus globoso-clausis, dein patellaribus, disco orbiculari, pallide flavidulo, 2-4 mm. diam., extus ad marginem pilis simplicibus, rectis, obtusis, fuscidulis, septatis, glabris, 200-250 \times 8-10, versus basim excipuli pilis conglutinatis, c. 100 μ . long., ad basim usque 15 μ . cr., subacutis et asperatis obsessis, excipulo ceraceo, e cellulis parenchymaticis, subhyalinis, magnis contexto; ascis cylindraceis apice rotundatis, 150-180 \times 15-18, octosporis, jodo immutatis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, hyalinis, episporio demum dilutissime longi-

tudinaliter plicato, brunneolo, 18-20 \times 12, monostichis; paraphysibus filiformibus, septatis, 3 μ . ad apicem usque ad 9 μ . cr., hyalinis.

Hab. ad lignum mucidum, Frankfort Michigan Amer. bor. (E. T. et S. A. HARPER).

12. *Lachnea calvescens* (Boud.) Sacc. et Trott., *Cheilymenia calvescens* Boud., Icon. Mycol. t. II, pl. 374 (1906), Hist. et Classif. Discom. Europe p. 63. — Minuta, 2-5 mm. lata, aurantio-rubra, pulvinata, rotundata, rarius sublobata, subtus pallidior, parce et breviter pilosa; ascis cylindraceis, octosporis, 220 \times 18; paraphysibus ad apicem clavatis, aurantio-rubris, simplicibus aut ad basim divisis, jodo virescentibus, clavula 10-13 μ . cr.; sporidiis ellipsoideis, extus minutissime verrucosis, 19-20 \times 9-10; pilis brevibus, simplicibus, raris, pallide fuscis, extremitate obtusa, ad basim simplicibus aut 2-3 divisis, 140-150 \times 10-12, 2-3-septatis.

Hab. ad terram viarum, Montmorency, Gallia.

13. *Lachnea aurea* (Boud.) Sacc. et Trav. — Syll. XIX, p. 1010 — 5430 *Cheilymenia aurea* Boud., Icon. Mycol. t. II, pl. 385 (1906), Hist. et Classif. Discomyc. Europe p. 63 (1907). — Minuta, 2-4 mm. lata, luteo-aurantiaca, subtus pallidior, vix marginata, pilis brunneis septatis, 270-680 \times 10-15, acutis, præcipue ad marginem vestita; ascis cylindrico-clavatis, octosporis, 220-240 \times 17-20; paraphysibus simplicibus aut parce divisis, luteo-aurantiacis, septatis, ad apicem incrassatis; sporidiis ellipsoideis, hyalinis, 19-22 \times 12-13, sæpe muco hyalino involutis.

Hab. ad fimum vaccinum, Angers Galliae (GAILLARD). — A *Lachn. stercorea* distincta.

14. *Lachnea Werthiana* P. Henn., Deutsche Südpolar-Exped. Bd. 5431 VIII (1906) Extr. p. 7, tab. I, fig. 10 a, d. — Ascomatibus primo subhemisphæricis clausis, dein cupulato-explanatis, extus ferrugineo-tomentosis, margine sæpe undulatis, pilosis, pilis subulatis, apice acutis v. obtusiusculis, brunneis, septatis, 100-200 \times 15-18, disco subplano, coccineo, levi; ascis cylindraceo-clavatis, vertice rotundatis, octosporis, 200-250 \times 15-20; paraphysibus filiformibus, 3 μ . cr., septatis, apice clavatis, flavo-granulatis; sporidiis monostichis, ellipsoideis, 1-2-guttulatis, 16-22 \times 14-17, episporio hyalino, granuloso-subaculeato.

Hab. ad terram muscosam, Kerguelen Station (E. WERTH). — A *Lach. kerguelensi* Berk. sporidiis omnino diversa.

15. *Lachnea brunneola* Rehm — Syll. XI, p. 399 — var. *brasiliensis* 5432 Bresadola, in Rick, Fungi austro-amer. II, Ann. Mycol. vol. III

(1905) p. 15. — A typo differre videtur hymenio pallido et forma ascomatum primitus turbinata.

Hab. ad terram in Brasilia.

16. *Lachnea austriaca* Sacc. et Trott., *Lachnea* (Melastiza) *Boudieri* 5433 v. Höhn. in Rehm Ascom. exsicc. fasc. 46, n. 1876, Ann. Mycol. (1910) p. 298, non *Lachnea* (Sepult.) *Boudieri* Torr. — Sanguineo-rubra, *Lachnea rubicundæ* affinis, a qua differt pilis acutis, simplicibus et sporidiis majoribus, 15-17 \times 10-12.

Hab. in argillosis prope Kalksburg in Wiener Wald Austriae.

17. *Lachnea antarctica* P. Henn., Deutsche Südpolar-Exped. Bd. 5434 VIII (1906) Extr. p. 8, tab. I, fig. 9 a-e. — Ascomatibus aggregatis, primo subglobosis, dein cupulatis, extus pallidulis, pilosis, margine pilis erectis, brunneis, apice obtusis v. subacutis, hyalinis, parce septatis, usque ad 200 \times 20 vestitis, disco aurantio, concavo v. subplano, levi, 1,5-2,5 mm. diam.; ascis cylindraceutis, apice rotundatis, octosporis, 200-250 \times 13-18; paraphysibus filiformibus, hyalinis septatis, 3-3,5 μ . cr., apice clavatis, granuloso-guttulatis; sporidiis ellipsoideis, oblique monostichis, 14-18 \times 10-15, episporio levi, hyalino subfufescente.

Hab. ad terram in ins. Kerguelen (E. WERTH).

SPHÆROSPORA Sacc. — Syll. VIII p. 188, XVI p. 720, XVIII p. 38.

1. *Sphærospora confusa* (Cke.) Sacc. — Syll. VIII, pag. 190 — var. 5435 *ochracea* Rehm, Ascom. exs. n. 1731 (1907) Ann. Myc. V (1907) p. 467. — A typo differt ascomatibus pallidioribus (pallide ochraceis nec brunneo-castaneis), statura evidenter majore (usque ad 6 mm. lat.).

Hab. in area combusta prope Zülz in Pakosz Silesiæ (BUCHS).

NEOTTIELLA (Cooke) Sacc. — Syll. VIII p. 190, XI p. 400, XIV p. 760, XVI p. 720, XVIII p. 39.

1. *Neottiella sericeo-villosa* Rehm, in Kellerman Journ. of Mycol. 5436 XIV (1908) p. 6. — Ascomatibus gregariis, ligno putrido insidentibus, primitus globoso-clausis, demum urceolatis, expansis, campanuliformibus, regulariter marginatis, haud stipitatis, disco cæruleo-livido, extus sericeo-villosis usque ad marginem, fuscidule cinereis, pilis simplicibus, rectis v. subcurvulis, interdum conglutinatis, obtusis, glabris, septatis, 500 μ . long., usque ad apicem æqualiter 5-7 μ . lat., subhyalinis, fragilibus obtectis, 0,5-5 cm. diam., 0,5-2 cm. alt.; hymenio plane involuto!

Hab. ad terram?, Volcano Atitlán alt. 2700 m. Guatemala et in Opuntia Dept. Amatitlán Guatemala (KELLERMAN). — Species pulcherrima, hymenio plane carens, secundum formam et excipulum hirsutum forsitan *Neottiellæ* sp. Similis videtur *Lachnæ Plumieræ* Fr. Americæ centr. Specimina in *Opuntia* lecta præbent ascos 40-46 \times 25-32, sporidia 20-22 \times 8, hyalina. « *Ægre fero, ait REHM, me in plurimis microscopicis præparatis intra excipula crasse tunicata modo ascos dispersos ovales, sporidia plane inevoluta includentes invenisse* ».

2. *Neottiella Höhnelliana* Rehm in v. Höhnel in Ann. Myc. III (1905) 5487 p. 554, c. ic. — Ascomatibus carnosus, primum albis arescendo extus sordide albis, usque ad 1 cm. diam., disco pallide brunneolo, conchato, margine subincurvato, integro, subacuto, tomentoso; præditis, basi angustatis, intus levibus, extus minute breviter tomentoso-velutinis, pilis hyalinis, tenuibus, obtusis, 4-7-ocularibus, subclavatis, 40-160 \times 20-26; ascis cylindræis, octosporis, 270 \times 11; paraphysibus 3-4 μ . cr., supra subclavatis et usque ad 5-6 μ . cr.; sporidiis hyalinis, unilocularibus, biguttulatis, ellipsoideis, levibus, 14-15 \times 8-9. J-.

Hab. ad terram in silvis prope Pressbaum, Wiener Wald, Austria.

3. *Neottiella subhirsuta* (Schum.) Sacc., Ann. Mycol. X (1912) p. 317, 5438 *Pyronema subhirsutum* (Schum.) Fuck. — Syll. VIII, p. 108 — *Humaria subhirsuta* (Schum.) Karst., Rehm. Disc. p. 943.

Hab. in lætamine ex foliis vinaceisque putridis formato in Horto botanico parmensi (Doct. C. BIANCHI). — Ascomata subiculo omnino carentia, raro usque ad 10-11 mm. lata, sæpius vero minora, extus pilis filiformibus flaccidis hyalinis septatis usque ad 350 \times 10 conpersa. Ob hanc notam et defectum subiculi vera *Neottiella*, non *Pyronema*, nec *Humaria*. *Neottiella fraudans* (Karst.) est verisimillime hujus mera varietas.

4. *Neottiella Trabutiana* Patouill., Bull. trim. Soc. Myc. de France, 5439 vol. XXI (1905) pag. 119. — Sparsa, sessilis, primum globulosa dein aperta, 0,5 cm. diam.; disco plano-concavo, rubro-aurantiaco; ascis cylindræis, rotundatis et apice operculatis, 180-250 \times 21-25, 8-sporis; paraphysibus cylindræis, rectis, apice claviformi incrassatis, septatis, intus granulis aurantiacis faretis; sporidiis monostichis levibus, hyalinis, ovoideis 18-22 \times 12-15, uniguttulatis; trama cellulosa incolori; superficie externa alba, pilis hyalinis parce septatis, acutis, 180-250 \times 21-25 prædita.

Hab. ad terram humidam muscosam prope Alger in Algeria Africæ bor. (TRABUT). — *N. Hetieri* Boud. proxima. Fibrillis hyalinis 3-5 μ . cr. crystallis incrustatis basi prædita.

SCLEROTINIA Fuck. — Syll. VIII p. 195, X p. 6, XI p. 401, XIV p. 761, XVI p. 721, XVIII p. 40.

1. **Sclerotinia Tiliæ** Reade, Ann. Mycol. VI (1908) p. 114. — Asco- 5440
matibus plerumque solitariis, cyathoides, longe stipitatis, 0,5-1 cm. altis, ceraceis; ascis cylindræo-clavatis, octosporis, apice rotundato-truncatis, 140-170 \times 8-10, J-; sporidiis oblique monostichis, obtuse ellipsoideis, continuis, hyalinis, 9-11 \times 4-5; paraphysibus sparsis, filiformibus, hyalinis.

Hab. ex sclerotiis in fructibus Tiliæ americanæ, Mt. Pleasant Iowa (S. J. SEAVER).

2. **Sclerotinia Corni** Reade, Ann. Mycol. VI (1908) p. 113. — Status 5441
ascophorus adhuc ignotus; status conidicus: cfr. *Monilia Corni* Reade.

Hab. in foliis Corni circinatæ in silvis Ithaca, New York Amer. bor.

3. **Sclerotinia Amelanchieris** Reade, Ann. Mycol. VI (1908) p. 114. 5442
— Status ascophorus adhuc ignotus; status conidicus: cfr. *Monilia Amelanchieris* Reade.

Hab. in fructibus Amelanchieris canadensis, Junus et Malloryville New York, Amel. Botryapii, Junus New York, Amer. bor.

4. **Sclerotinia angustior** Reade, Ann. Mycol. VI (1908) p. 113. — 5443
Ascomatibus plerumque solitariis, 0,5-2 mm. altis, cyathoides, longe stipitatis, ceraceis, extus glabris; excipulo ad exteriorem partem pseudoparenchymatice ad interiorem prosenchymatice contexto; ascis cylindræo-clavatis, octosporis, 150-160 \times 8-10, apice rotundato, J+; paraphysibus parvis, angustis, 2 μ . cr., apice usque ad 4 μ . incrassatis, septatis, hyalinis; sporidiis oblique monostichis, obtuse ellipsoideis, 10-11 \times 5-6, continuis, hyalinis; conidiis (*Monilia angustior* (Sacc.) Reade = *M. Peckiana* var. *angustior* Sacc., Syll. X, p. 517) subgloboso-citriformibus 10-20 μ . cr. plerumque 12-15 μ ., continuis, hyalinis, catenulatis, disjunctioribus præditis, in maculis effusis, albedo-cinereis pulvereis.

Hab. in fructibus sclerotisatis vere et in ramulis vivis æstivis Pruni virginianæ L., Ithaca New York Amer. bor. — *Scl. Seaveri* affinis differt matrice et chlamydosporis latioribus.

5. *Sclerotinia laxa* Aderh. et Ruhl., Arb. k. Gesundheits. Bd. IV 5444 (1905) p. 427. — Affinis *Sclerot. fructigenæ*; distinguitur caespitulis conidiorum griseis, parvis; ascis 124-149 \approx 8,5-11,8; sporidiis ellipsoideis, obtusis (nec acutis), 11,5-13,5 \approx 5,2-6,9, sæpe guttulis oleosis præditis.

Hab. in fructibus mumificatis Pruni Armeniacæ in Germania. — Status conidiophorus est *Monilia laxa* (Ehrenb.) Sacc. — Syll. IV, p. 35.

6. *Sclerotinia Padi* Woron. in Mem. Acad. St. Petersb. XXXVI, 1888, 5445 p. 40 et 1895, tab. I-IV, Rehm, Disc. pag. 808. — Ascomatibus ex quoque sclerotio singulis v. raro binis, stipitatis, glabris, pallide brunneis; cupula 4-5 mm. lata, plano-concava; stipite filiformi, pro more longo, 0,5-2,5 cm. longo, 0,5-0,7 mm. cr.; ascis cylindræis prælongis, 168 \approx 10, apice rotundatis brevissime noduloso-stipitatis, octosporis; paraphysibus filiformi-clavulatis, septatis obvallatis; sporidiis in tertia asci parte super. sitis, oblique monostichis, oblongo-ellipsoideis, biguttatis, hyalinis, 12-13 \approx 6-7,5.

Hab. in sclerotiis ad fructus mumificatos Pruni Padi in Russia, Hungaria. — Status conidiophorus oritur in foliis et est *Monilia Linhartiana*. — Cfr. Woron. l. c.

7. *Sclerotinia Aucupariæ* Woron. in Mém. Acad. imp. Sc. St. Petersb. 8 sér., II 1 (1895) p. 15, t. 5 et in Zeitschr. f. Pflanzenkr. V (1895) pag. 134, t. 4. — Ascomatibus dilute brunneis, glabris, stipitatis; cupula 5-7 mm. lata, leviter concava, stipite 5-7 mm. longo, 0,5-0,7 mm. cr., filiformi, sæpe tortuoso, basi arrhizo; ascis cylindræis apice rotundatis, brevissime noduloso-stipitatis; sporidiis in asci tertia super. parte sitis, oblique monostichis, 11 \approx 5,5, hyalinis, biguttulatis, oblongo-ellipsoideis, utrinque rotundatis; paraphysibus filiformi-clavulatis, septatis.

Hab. in fructibus mumificatis Sorbi aucupariæ in Fennia (Woronin) et in Erzgebirge (Ludwig). — Ex quoque fructu oriuntur 1-4 ascomata. In foliis generatur st. conidiophorus, idest *Monilia Linhartræ* species affinis. Cfr. Woron. l. c. cum icon.

8. *Sclerotinia Cratægi* Magnus in Ber. Deutsch. Bot. Gesell. (1905) 5447 p. 197, t. V — Cfr. Syll. XVIII, p. 503. — Ascomatibus longe stipitatis, brunneis; stipite tortuoso, irregulariter cylindræo, 2-3 cm. longo, 1,5 mm. cr., sæpe noduloso, cupula mox explanato-convexa, margine involuta, passim incisa 3-8 mm. lata; ascis cylindræis, 170 \approx 10-11, p. sporif. 65 μ . longa, octosporis; sporidiis ellipsoideis, utrinque acutiusculis, 10-10,5 \approx 5-5,2, hyalinis, faretis.

Hab. in fructibus immaturis mumificatis et sclerotisatis *Cratægi Oxycanthæ* in Thuringia (DIEDICKE), Silesia (EIDAM), Borussia (LAUBERT). — Status conidiophorus foliicola: *Monilia Cratægi* Died. — Syll. l. c. — In fructibus oritur quoque alia forma conidiophora. Cfr. Magn. l. c. t. V, f. 8.

9. **Sclerotinia Mespili** Woron. in Berichte Deutsch. bot. Gesell. IX 5448 (1891) p. 103 et Rehm Disc. p. 809 (st. conid.), Schellenberg in Centralbl. Bakt. II Abt. XVII (1907) p. 188, t. I-II (st. ascoph.). — Ascomatibus gregariis, breviter stipitatis, glabris; cupulis concavis 2,5 mm. latis; stipite cylindraceo, sæpe curvulo, 5 mm. long., 1 mm. cr.; ascis cylindraceis, apice rotundatis, deorsum sensim tenuato-stipitatis, octosporis, paraphysibus filiformi-clavulatis, septatis obvallatis, 160-180 \times 10-12; sporidiis in medietate asci sup. sitis, oblique monostichis ellipsoideis, hyalinis, levibus, 12-14 \times 8-9.

Hab. in fructibus mumificatis germinantibus *Mespili germanicæ*, Lugano, M. Bré, M. Generoso, Poschiavo Grigioni et in insula Mainau lacus Constantiæ, Helvetia. — Status conidiophorus est *Ovularia necans* Pass. quæ occurrit in foliis *Mespili* quoque in Italia et Franconia.

10. **Sclerotinia Cydoniæ** Schell. in Centralbl. Bakt. II Abt., XVII 5449 (1907) p. 189, *Stromatinia Linhartiana* Prill. Mal. pl. agric. II, p. 439, cum figg., excl. syn. — Ascomatibus solitariis v. 3-5-aggregatis, e brunneo cinereo-violaceis, stipitatis; cupulis plano-concavis, tenuiter marginatis, 0,5-1 cm. lat.; stipite breviusculo, cylindraceo, 1-1,5 cm. longo, in cupulam sensim dilatato; ascis cylindricis apice truncatis, 168 μ . longis, paraphysibus bacillari-clavulatis pseudoseptatis obvallatis, octosporis; sporidiis in asci medietate sup. oblique monostichis, ellipsoideis, hyalinis, 12 \times 7-7,5.

Hab. in fructibus mumificatis *Cydoniæ vulgaris* in Gallia, Helvetia, Italia. — Status conidicus nascitur in foliis et refert *Monilice* speciem peraffinem *M. Linhartianæ*. Cfr. Prill. l. c.

11. **Sclerotinia Seaveri** Rehm, Ascom. Amer. bor., Ann. Myc. v. III 5450 (1905) p. 519; Ann. Myc. IV (1906) p. 66; Ascomyc. (1906) n. 1633; Reade in Ann. Mycol. VI (1908) p. 112. — Ascomatibus plerumque solitariis in putamine sessilibus, longe stipitatis, primitus cyathoides, dein patellaribus, disco orbiculari, distincte marginato, flavidulo, 5-10 mm. diametro, margine tenuissime crenulato, excipulo cum stipite glabro, fuscidulo, stipite cylindrico, curvatulo, 0,4-0,5 mm. lat., versus ascoma et basim subcrassiore, 1-2 cm. longo, siccis, extus cinereo-fuscidulis; excipulo prosenchymatico;

ascis cylindræis, apice rotundatis et incrassatis, 120-140 \approx 6-8, octosporis; poro jodo immutato; sporidiis obtuse ovoideis, 1-cellularibus, plerumque guttulis oleosis 2 instructis, hyalinis, 10-12 \approx 4,5-5, monostichis; paraphysibus sparsis, filiformibus, 2 μ ., ad apicem 4 μ . cr., hyalinis; conidiis subgloboso-citriformibus, continuis, hyalinis, 7-15 μ ., plerumque 8-10 μ ., catenulatis, disjunctioribus præditis, in maculis effusis, albido-cinereis, pulvereis, epiphyllis (*Monilia Seaveri* Reade).

- Hab.* ad putamina Pruni serotinæ in terra putrescentia locis humidis silvarum, Iowa City, Iowa Amer. bor. (SEAVER). — Verisimiliter ex cotyledonibus scleroticis oritur. — *Sclerotinia Prunispinosæ* (Lib.) Speg. et Roum. in foliis exsicc. est plane diversa. 5451
12. *Sclerotinia Cerasi* Woron. Mém. Ac. St. Pétersb. XXXVI (1888) p. 39; Rehm, Discom. in Rabenh. Krypt, Fl. III (1896) p. 809. — Status sclerotialis et conidicus tantum sed imperfecte noti.

Hab. in fructibus mumificatis Pruni Cerasi in Finlandia.

13. *Sclerotinia Polycodontis* Reade, Ann. Mycol. VI (1908) p. 110. 5452
- Ascomatibus 1-4, cyathiformibus, longe stipitatis, 1-3,5 cm. altis, ceraceis, extus fuscidulis quasi glaucis; ascis cylindræo-clavatis apice rotundato-truncatis, 200-240 \approx 10-14, J +; sporidiis 8, obtuse ellipsoideis, 15-20 \approx 10-12, continuis, hyalinis, biguttulatis monostichis; excipulo prosenchymatice contexto; chlamydosporis catenulatis disjunctioribus præditis, subgloboso-citriformibus, 15-16 \approx 11-13, hyalinis, continuis, in maculis effusis, albido-cinereis, pulvereis (*Monilia Polycodontis* Reade n. f.) paraphysibus paucis, angustis, simplicibus, 2 μ . crassis., apice incrassatulis, septatis, hyalinis.

Hab. in fructibus sclerotisatis ramulisque vivis Polycodontis staminei, in silvis humidis Ithaca New York Amer. bor. — A *Scl. Vaccinii-corymbosi* differt matrice et chlamydosporis minoribus.

14. *Sclerotinia Vaccinii-corymbosi* Reade, Ann. Mycol. VI (1908) 5453 p. 109. — Ascomatibus 1-7, ceraceis, longe stipitatis, 1-3,5 cm. altis, cyathiformibus, tenuiter marginatis, extus fuscidulis quasi glaucis; ascis cylindræo-clavatis, apice rotundato-truncatis, 200-260 \approx 10-12, J +; paraphysibus angustis, paucis, simplicibus, 2-3 cr., apice incrassatulis, septatis, hyalinis; excipulo prosenchymatico; sporidiis 8 obtuse, ellipsoideis, continuis, hyalinis, 14-18 \approx 9-10, oblique monostichis; chlamydosporis catenulatis disjunctioribus præditis, subgloboso-citriformibus, hyalinis, 23-32 \approx 19-25, in

maculis effusis, albido-cinereis, pulvereis (*Monilia Vaccinii-corymbosi* Reade n. f.).

Hab. status ascophorus in fructibus sclerotisatis *Vaccinii corymbosi* vere, status chlamydosporicus in ramulis vivis inflorescentisque æstivis, in sphagneto, Malloryville New York Amer. bor. — *Scl. Vaccinii* Wor. affinis, differt matrice, ascomatibus semper fructicolis, chlamydosporis minoribus.

15. *Sclerotinia Ocymi* Voglino, in Ann. R. Acc. Agric. Torino LII 5454 (1909) p. 284, in Atti R. Accad. Scienze Torino (1910) p. 265, f. 1. — Stipitata, minuta, carnosio-ceracea, castaneo-violacea; stipite tenui, cylindræco, 2-2,5 mm. longo, ad basim atro, sursum castaneo-violaceo; cupula minuta cyathiformi, 1,5-2 mm. lata, castaneo-violacea; ascis cylindræco-clavatis, 8-sporis, 55-70 \approx 6-8; sporidiis ovoideis, hyalinis, 5-8 \approx 4-5, raro 6; paraphysibus filiformibus, supra clavato-incrassatis, 70-75 \approx 2-4.

Hab. in sclerotio, ad caules *Ocymi* Basilici quod morbo afficitur, Venaria Reale, Torino Italiæ bor.

16. *Sclerotinia Plöttneriana* Kirchst., in Rehm, Ascom. exsicc. n. 1603 5455 (1905) et Bot. Ver. Prov. Brandenb. XLVIII (1906) p. 43. — Ascomatibus ex seminibus matricis sclerotiatibus nigricantibus orientibus, 1-4 aggregatis, longe pedicellatis, pedicello 1-10 mm. longo et 0,5 mm. cr., pallide v. obscure brunneo; disco concolori primum globoso-clauso, dein applanato v. plus minus infundibuliformi, 2-3 mm. circ. lato, acute marginato; ascis cylindræceis, 160-180 \approx 10-12, breviter et crasse pedicellatis, supra rotundatis, octosporis; sporidiis hyalinis, monostichis, unilocularibus, ovoideis, quandoque inæquilateris, 1-2-guttulatis, 15-18 \approx 6-7; paraphysibus filiformibus, hyalinis, continuis, 3 μ . circ. cr.

Hab. in seminibus *Veronicæ hederifoliæ*, pr. Rathenow et Gross-Behnitzer Hasellake Germaniæ.

17. *Sclerotinia hirtella* Boud., Icon. Mycol. t. III, pl. 471 (1907); 5456 Hist. et Classif. Discomyc. Europe (1907) p. 107. — Minuta, gracilis, stipitata, 5-10 mm. alta, tota pallide ochraceo-cinerella, e sclerotio nigro, oblongo enata; cupulis infundibuliformibus, dein applanatis plus minusve longe stipitatis, extus undique, ut pedicello, pallide hirtis, hymenio concolore; pilis acutis, flexuosis, septatis, simplicibus aut bifidis, 90-115 \approx 4; ascis cylindrico-clavatis, octosporis, 90-115 \approx 7-8; paraphysibus linearibus ad apicem paululum incrassatis, albis; sporidiis ovoideo-oblongis, albis, hyalinis,

intus non granulosus, $7-9 \approx 4-5$; sclerotio nigro, sulcato, oblongo sæpe curvato, $2-4 \approx 1,5$, uni- aut pluricupulifero.

Hab. ad folia et ramulos putres Castaneæ in silva Montmorency Galliae. — *Scl. Candolleana* affinis a qua differt sclerotio oblongo et pilis.

18. **Sclerotinia Bresadolæ** Rick in Österr. bot. Zeitschr. L (1900), 5457

p. 121. — Ascomatibus gregariis e sclerotio exterius nigro, interius albescente, rugoso, ovali, fere sphaerico, 2 mm. diam. provenientibus; primitus calyciformibus, demum disciformibus, margine tenero, hyalino-fuscis v. pallidis, stipite tenuissimo filiformi, 1-5 cm. longo, villosus, versus discum fere lanuginosus, 1-5 cm. latis, ceraceis, mollibus; ascis cylindræis $70-80 \approx 6-7$, octosporis, poro rotundato jodo cærulescente; sporidiis ovoideis, uno apice paulo latioribus, hyalinis, $6-8 \approx 3-4$; paraphysibus hyalinis, filiformibus, versus finem 3 μ . latis.

Hab. in gemmis Quercus putrescentibus ope Dryoteratis terminalis transformatis, Valkenburg, hollandice Limburg. — *Scl. Candolleana* (Lév.) affinis.

19. **Sclerotinia rathenowiana** Kirschst., in Rehm Ascom. exsicc. n. 1649 5458

(1905) et in Verh. bot. Ver. Prov. Brandenb. XLVIII (1906) p. 43. — Sclerotii in cortice immersis demum secedentibus, variabilibus, intus extusque nigris, superficie nitidis; ascomatibus pedicellatis, pedicello usque ad 3 cm. et ultra long., 0,5 mm. cr., primum albo pulveraceo dein nudo, rubido- v. griseo-brunneo; ascomatibus ceraceis pallide brunneo-griseis, siccis brunneoli, usque ad 6 mm. latis, primum infundibuliformibus, dein applanatis demumque revolutis, tenuibus; ascis cylindræis, $110-130 \approx 6-8$, breviter pedicellatis, supra applanatis incrassatisque, octosporis, monostichis, ellipsoideis, quandoque inæquilateris, eguttulatis, unilocularibus, hyalinis, $7-11 \approx 4-5$; paraphysibus filiformibus, hyalinis, septatis, supra usque ad 3 μ . incrassatis.

Hab. in ramulis salicinis putrescentibus prope Rathenow Germaniæ.

20. **Sclerotinia Alni** Maul, Hedw. XXXIII (1894) p. 215, t. XI-XII, 5459

Rehm, Disc. p. 1237. — Ascomatibus . . . ignotis; sclerotii in acheniis Alni orientibus et sat deformantibus, parum extantibus; conidiophoris ex sclerotio achenioque connato hinc inde dense caespitose erumpentibus, ex albo virescentibus et *Spicaria* speciem (*S. Alni* Sacc.) sistentibus: conidiophoris primariis erectis, 4 μ . cr. filiformibus, parce septatis, subinde furcatis, sursum verticillato-

ramosis, verticillis plerumque binis inter se remotis (non penicillioideis) ramulis quaternis-quinis, sensim tenuatis, apice sporigeris; conidiis in catenulas senis-octonis dispositis, inæqualiter ellipsoideis, subangulosis, hyalinis, levibus, $1,7-2 \approx 1,5$.

Hab. in acheniis Alni glutinosæ, Reinhardsau Germaniæ (Rees).

21. **Sclerotinia Coryli** Schell. in Ber. Deutsch. Bot. Gesell. (1906) 5460

p. 505, t. XXI. — Ascomatibus solitariis v. raro binis, longe stipitatis; cupulis infundibuliformibus concaviusculis dein subplanis 8-12 mm. latis, ambitu acutiusculis, ceraceis, late brunneis, disco pallidiore; stipite filiformi usque ad 5 cm. longo, 2 mm. cr., glabro, filiformi, sæpe leviter tortuoso; ascis cylindraceis, apice rotundatis deorsum sensim et longe tenuato-stipitatis, $140-160 \approx 10-12$, paraphysibus filiformi-clavulatis, parce septatis, raro furcatis; sporidiis oblique monostichis, ovoideis, utrinque obtuse tenuatis, $15-16 \approx 8$, hyalinis, intus granulosis, levibus.

Hab. in amentis masculis Coryli Avellanæ, ex eorum axi sclerotisato proveniens, pr. Poschiavo, Grigioni.

22. **Sclerotinia Betulæ** Woron., Mem. Acad. Sc. St. Petersburg. XXXVI 5461

(1888) n. 7, Nawaschin, Sclerot. Betulæ, St. Petersburg. 1893, p. 32, t. I-IV, Tubeuf. Pflanzenkr. pag. 274, cum icon. — Ascomatibus solitariis v. binis, disco 0,5-1,5 cm. longo, 1-1,5 mm. lato, initio infundibuliformi dein cupulato, 1-4 mm. lato, flavo v. subcarneo, recto v. obliquo, cylindraceo, stipite basi rhizoidibus prædito ascis octosporis; sporidiis

Hab. in fructibus Betulæ in Germania.

23. **Sclerotinia Galanthi** Ludw. Lehrb. nied. Kryptog. p. 355 (1892) 5462

Rehm, Discom. p. 820 in Rabenh. Krypt. Fl. III (1896). — Status sclerotialis et conidicus tantum sed imperfecte noti.

Hab. in foliis floribusque Galanthi nivalis, Mecklenburg Germaniæ.

24. **Sclerotinia Paridis** (Boud.) Sacc. et Trav. — Syll. XX, p. 766 — 5463

Stromatinia Paridis Boud., Icon. Mycol. tab. III, pl. 479 (1905), Hist. et Classif. Discom. Europe pag. 108 (1907). — Major, stipitata, 1-2 cm. lata, fulvo-cinnamomea, pediculo flexuoso nigrescente longiore; cupulis primo infundibuliformibus, dein plus minusve applanatis, extus glabrescentibus, margine dentato; ascis minutis, cylindricis, inoperculatis, octosporis, $130-140 \approx 8-10$; paraphysibus linearibus, ad apicem non incrassatis, 2-3 μ . cr., hyalinis;

sporidiis oblongo-ovoideis, inaequilateralibus, hyalinis sed intus guttulis oleosis pluribus ad extremitates repletis, $10-13 \times 4-6$.

Hab. in radicibus denigratis *Paridis* quadrifoliæ in argillis silvaticis Ecoenen Gallia.

25. *Sclerotinia vesicaria* Giesenh., Ber. Bayr. Bot. Ges. XI (1907) 5464

p. 169. — Sclerotiiis irregulariter cylindraceis, rugosis, nigris, intus albidis, 5-8 mm. long., 2 mm. latis; ascomatibus singularibus vel pluribus pallide fulvis v. cinnamomeis, stipitatis, stipite 2-8 mm. long., 0,5-1 mm. cr., subtus tomentoso, disco cupulæformi 3-4 mm. diam., levi, disco cinnamomeo; paraphysibus numerosis filiformibus ad apicem vix incrassatis, 2 μ . cr.; ascis tenuibus cylindraceis, octosporis, $180-190 \times 9$; sporidiis fusoideis, hyalinis, 12×4 .

Hab. inter utriculos dejectos emortuos *Caricis* vesicariæ, autumnno oriens, ad Stechsee prope Seeshaupt Bavariæ. — A ceteris *Sclerotiniæ* speciebus cariciculis satis diversa. Teste cl. Magnus *Cintractia Caricis* (Pers.) Magn. est species autonoma, non *Sclerotiniæ* st. conidiophorus ut opinatur cl. Giesenhagen.

26. *Sclerotinia Lindaviana* Kirschst. in Rehm, Ascom. exs. n. 1604 5465

(1905) et in Verh. Bot. Ver. Prov. Brandenb. XLVIII (1906) p. 42. — Sclerotiiis foliiculis v. vaginicolis, angustis, depressis, irregularibus, nigris, sæpe con crescentibus, 1 cm. long., 0,5 cm. crassiss; ascomatibus flavo-brunneolis, longitudine variabilibus, pedicello $\frac{1}{4}$ mm. cr., pruinoso; ascomatibus 2 mm. circ. diam., primum globoso-clausis dein applanatis, acute marginatis; disco plerumque pallidius colorato; excipulo prosenchymatico, brunneo; ascis cylindraceis, pedicellatis, $40-45 \times 4$, octosporis; sporidiis oblique monostichis, hyalinis, ovoideis, plerumque irregularibus, eguttulatis, $4-5 \times 1,5-2$; paraphysibus filiformibus, hyalinis, 1,5 μ . cr.

Hab. in foliis vaginisque putrescentibus *Phragmitis* communis, Gross-Behnitzer See et prope Rathenow Germaniæ.

27. *Sclerotinia Menieri* Boud., Icon. Mycol. tom. III, pl. 475 (1907), 5466

Hist. et Classif. Discomyc. Europe (1907) p. 108. — Minuta, pediculata, fulva, pediculo elongato glabro fuliginoso, supra pallidiore, e sclerotio, primo rotundato, tomentoso, albido dein rufescente; ascis octosporis inoperculatis, foramine marginato jodo cærulescente, cylindraceis, $120-130 \times 8-10$; paraphysibus tenuibus, non granulosis, ad apicem vix incrassatis, 4 μ . cr.; sporidiis ovatis, hyalinis, intus guttula minuta subcentrali rarius divisa præditis, $12-14 \times 6-7$.

Hab. in paludosis in foliis primis vivis *Phalaridis* arundinacæ prope Nantes, Gallia (MENIER).

28. *Sclerotinia Fuckeliana* De By. — Syll. VIII, pag. 196 — var. 5467
Jeanperti Boud., Icon. Mycol. t. III, pl. 469 (1907), Hist. et Clas-
 sif. Discomyc. Europe (1907) p. 107. — Pro genere media, fusco-
 badia, e sclerotio cylindrico-difformi enata, paraphysibus cylindri-
 cis, ascis longioribus, a typo diversa.

Hab. in paludosis ad ripas Loing Galliae (M. JEANPERT).

29. *Sclerotinia wisconsinensis* Rehm, Ann. Mycol. VI (1908) p. 317. 5468
 — Ascomatibus e sclerotio suborbiculari subtus convexulo, in supe-
 riore parte plus minusve plano vel umbilicato, extus nigro, intus
 albo, sicco corrugato, 3-6 mm. lato, 2,5-3 mm. crasso, 2-5, rarius
 singulis orientibus, primitus sphaeroideis, demum disciformibus, te-
 nuiter marginatis, 1,5-3 mm. latis et altis, flavo-brunneis, glabris,
 senilibus fusco-brunneis, longe stipitatis; stipite cylindraceo, ca.
 0,15-0,2 mm. lato, infra excipulum subcrassiore, 2-3 cm. longo,
 glabro, curvatulo, erecto, flavo-brunneolo; ascomatibus siccis cum
 stipite longitudinaliter corrugatis, disco albido-consperso; ascis cla-
 vatis, apice rotundatis, 150-180 × 12-15, octosporis, jodo cærule-
 scentibus; sporidiis fusoides, utrinque plus minusve rotundatis,
 plerumque 1-2 guttis oleosis magnis præditis, hyalinis, 20-22 × 7,
 mono- rarius distichis; paraphysibus filiformibus, prominentibus,
 obtusis, septatis, hyalinis, 3-4 μ . crassis.

Hab. in silvis humidis ad terram fragmentis ligneis mixtam
 Madison Wisc. Amer. bor. (E. G. ARZBERGER). — A *Sclerotinia*
gracili recedit sclerotiis sporidiisque minoribus.

30. *Sclerotinia sclerotiorum* (Lib.) Sacc. et Trott. — Ita vocanda est 5469
Peziza sclerotiorum Lib. Crypt. exs. IV, n. 326 (1837), *Sclerotinia*
Libertiana Fuck. Symb. p. 331 (1869) — Syll. VIII, p. 196 (ubi
 alia synonyma), *Peziza Antzii* Münter in Bull. Acad. Sc. Belg. XI
 (1861) p. 222, f. 1-5.

31. *Sclerotinia nyssogena* (Ellis) Rehm, Ann. Mycol. IV (1906) p. 338. 5470
 — Ita vocanda *Peziza nyssogena* Ellis seu *Ciboria nyssogena* (El-
 lis) Sacc. — Syll. VIII, p. 207.

Hab. in drupis vetustis Nyssæ multifloræ sub foliis coa-
 cervatis in Amer. bor.

32. *Sclerotinia Johnsonii* (E. et E.) Rehm, Ann. Mycol. IV (1906) 5471
 p. 338; Reade Ann. Myc. VI (1908) p. 111. — Ita vocanda: *Ci-
 boria Johnsonii* E. et E. (Proc. Acad. Phil. (1894) pag. 348 —
 Syll. XI, p. 402.

Hab. in fructibus dejectis Mali in Amer. bor. — Sec. Reade

- l. c. *Monilia Cratægi* Died. hujus esset st. conidiophorus, qui potius ad *Scl. Cratægi* P. Magn. spectat. Cfr. n. 8.
33. *Sclerotinia aconitincola* Rehm, (Esterr. bot. Ztschr. LVI (1906) 5472 p. 347. — (Nomen nudum).

Hab. in caulibus siccis *Aconiti* sp. Schrofенpass, Algovia.

CIBORIA Fuck. — Syll. VIII p. 201, XI p. 402, XIV p. 762, XVI p. 723, XVIII p. 45.

1. *Ciboria Fagi* Jaap, Fungi sel. exsicc. n. 353, Abh. Bot. Ver. Prov. 5473 Brandb. LII (1910) Extr. pag. 3. — Ascomatibus tenuibus, pure albis, solitariis, sed in squamis gemmaceis gregariis, initio infundibuliformi-dein disciformi-dilatatis, 0,4-0,6 mm. lat.; stipite gracillimo ad 8 mm. long.; ascis tereti-clavatis, rotundatis, subincrassatis, 48-52 \times 4,5-5,5, octosporis; sporidiis elongato-ellipsoideis v. clavatis, rotundatis, continuis, sæpe biguttulatis, 6 8,5 \times 2-2,5, mono- v. distichis, oblique dispositis; paraphysibus filiformibus, obtusis, hyalinis; asci poro jodi ope cærulescente.

Hab. in squamis putrescentibus gemmarum *Fagi* silvaticæ, Schleswig-Holstein Germaniæ.

2. *Ciboria argentinensis* Speg., Myc. Argent. IV, in An. Mus. Buenos Aires (1909) p. 444. — Mediocris, ochroleuca, subtenuis, coriacea, orbicularis, glaberrima, 5-20 mm. diam., margine integerrimo breviter pedicellata, pedicello vix obscuriore 3-5 mm. long., 1-1,5 mm. cr.; ascis jodo immutatis, linearibus, paraphysatis, truncatis, 200-220 \times 14, stipite 60-100 μ . long.; sporidiis octonis, elliptico-navicularibus, utrinque acutis, monostichis, 26 \times 11, sæpius conspicue 2-guttulatis.

Hab. ad ramos dejectos putres *Celtidium* in sepibus pr. Tucuman, Argentina.

3. *Ciboria fusco-cinerea* Rehm, Ann. Mycol. VII (1909) pag. 525, 5475 Ascom. exsicc. fasc. 45, n. 1853. — Ascomatibus gregariis, sessilibus, primitus globoso-clausis, dein cyathoideis, demum disco plus minusve explanato, orbiculari, tenuissime marginato, interdum medio umbilicato, 0,3-1 cm. diam., extus glabris cum stipite cylindrico, versus basim attenuato et fusciscente, 1-5 cm. longo, 0,5-0,7 mm. lato, hyalino-cinereis, demum alutaceo-fuscidulis, ceraceis, prosenchymatice contextis; ascis cylindræis, apice rotundatis et incrassatis, 150 \times 10-12, 8-sporis, jodo cærulescentibus; sporidiis oblongo-clavatis, apice superiore obtusis, sæpe subcurvatis, 1-cellularibus, gutta magna centrali oleosa instructis, hyalinis, 20-24 \times 5-6,

monostichis; paraphysibus filiformibus, septatis, hyalinis, 2,5 μ . apice obtusis, 3 μ . cr.

Hab. ad ligna Coniferarum humo oblecta, putrescentia in silvis prope Krohnes Lake et Perrys Swamp, Algoma Wisc. U. S. A. (B. A. DODGE).

4. *Ciboria acicola* Kirschst., Verh. Bot. Ver. Brandenb. XLVIII (1906) 5476 p. 42. — Ascomatibus solitariis, pedicello tenui c. 0,5 mm. diam., 4-5 mm. long., obscure griseo-brunneo, infra nigricante, primum globoso-clausis mox discoideis, acute marginatis, 2 mm. diam.; disco ceraceo pallidiore extus obscuriore; ascis cylindraceo-clavatis, breviter pedicellatis, $90 \approx 8$, octosporis; sporidiis oblique monostichis, hyalinis, eguttulatis, unilocularibus, ellipsoideis, $8-10 \approx 3-4$; paraphysibus hyalinis, filiformibus, supra claviformi incrassatis.

Hab. in foliis putrescentibus Abietis (Piceæ) excelsæ, Gross-Bechnittzer Park Germaniæ.

5. *Ciboria Hedwigiae* (Kirschst.) Sacc. et Trott., *Rutstræmia Hedwigiae* 5477 Kirschst., Verh. Bot. Ver. Brandenb. XLVIII (1906) p. 41. — Ascomatibus solitariis v. confertis, pedicellatis; pedicello basi brunneo-nigro incrassato, supra pallide flavo-brunneo, nitidulo, levi, indistincte striato, 3-4 mm. long., circ. 0,5 mm. cr.; ascomate primum globoso clauso, dein aperto et acute marginato, demum applanato, rubro-brunneo, 1-1,5 circ. mm. diam.; excipulo brunneo, prosenchymatico, cellulis marginalibus filiformibus; ascis clavatis supra rotundatis, basi in pedicellum tenuatis, crasse tunicatis, octosporis, $140-170 \approx 16-18$; sporidiis irregulariter distichis, hyalinis, granuloso-faretis, ellipsoideis vel oblongis, quandoque fere clavatis, primum 1- dein 2-septatis, $16-22 \approx 6-8$; paraphysibus filiformibus, vix $\frac{3}{4}$ μ . cr., ramosis, hyalinis, supra brunneolis et usque ad 2 μ . cr.

Hab. parasitice inter foliola Rhacomitrii canescentis, in silvis prope Rathenow Germaniæ.

6. *Ciboria scoparia* Rehm in Jaap; Abh. bot. Ver. Prov. Brandenb. 5478 LII (1910) p. 113. — (Nomen nudum).

Hab. in leguminibus putrescentibus Sarothamni scoparii prope Triglitz, Brandenburgia.

CHLOROSPENIUM Fr. — Syll. VIII p. 315, X p. 12, XI p. 407, XIV p. 773, XVIII p. 65.

1. *Chlorosplenium atro-viride* Bres., in Rick Fungi austro-amer. III, 5479

u. IV, n. 64, Ann. Myc. v. IV (1906) pag. 311. — (Nomen nudum).

Hab. in ligno in Brasilia, America austr.

HELOTIUM Fr. — Syll. VIII p. 210, X p. 6, XI p. 402, XIV p. 762, XVI p. 726, XVIII p. 47.

1. **Helotium Staudtii** P. Henn., Engl. Jahrb. XXXVIII (1905) p. 128. 5480
— Ascomatibus gregariis, ceraceo-carnosis, subsessilibus, primo sub-turbinato-cupulatis, dein subdiscoideis, marginatis, extus pallide pruinosis, margine integro v. crenulato, 0,4-0,8 mm. diam., disco concavo v. plano, flavido-brunneo; ascis clavatis, apice obtuse rotundatis, octosporis, 30-45 \approx 3-3,5; paraphysibus filiformibus, septatis 1,5-2 μ . cr.; sporidiis oblique mono- v. subdistichis, clavatis v. subfusoides minute 2-guttulatis, hyalinis.

Hab. in superficie interna corticis *Baphiæ*, Lolodorf Kamerun Africae centr.

2. **Helotium Verbenæ** Cavara, Rev. Mycol. XI (1889) p. 178, t. 88 bis, 5481
f. 2. — Ascomatibus sparsis, stipitatis, firmis, majusculis, cupula primo infundibuliformi, demum expansa, pallide lutea, tomentosa, margine crenato-fimbriato, 1-2,5 mm. alta, disco plano levi, initio luteo dein ochraceo; stipite 1,5-3 mm. alto, crassiusculo, basi lutescenti, superne albicante; ascis cylindraceo-clavatis, 100-110 \approx 9-10, octosporis; paraphysibus filiformibus, continuis; sporidiis clavatis, leniter curvis, unicellularibus, monostichis, utrinque v. tantum basi cilium gerentibus, 20-22 \approx 4-5.

Hab. in caule emortuo *Verbenæ officinalis*, Pavia in Italia boreali.

3. **Helotium nubilipes** Boud., Icon. Mycol. t. III, pl. 491 (1907), Hist. 5482 et Classif. Discomyc. Europe (1907) p. 111. — Medium, albidum, 3-5 mm. altum, totidem latum, stipite elongato, minutissime puberulo, ad basim nigrescente, cupula marginata dein plana, extus glabra; ascis clavatis, octosporis, 140-160 \approx 12-13, foramine marginato; paraphysibus linearibus, ad apicem paululum incrassatis, granulosi, 5-6 μ . cr.; sporidiis majoribus, 22-34 \approx 5-6, clavæformibus, antice rotundatis, ad basim acutiusculis, albis, intus guttulis inæqualibus præsertim ad extremitates repletis.

Hab. in paludosis sub caulibus *Cirsii oleracei*, Montmorency, Gallia.

4. **Helotium herbarum** (Pers.) Fr. — Syll. VIII, p. 217 — (= *Phialea Hymenula* (Fuckel) Sacc., Syll. VIII, p. 262) — var. *Tanacetii*- 5483

vulgaris C. Mass., Osserv. fitol. in Madonna Verona v. II (1908) p. 10. — Ascis 4,5 μ . cr.; sporidiis subfusoideo-cylindræis, hyalinis, 10-12 \approx 3.

Hab. in caulibus siccis Tanaceti vulgaris, prope Bolca in agro Veronensi Ital. bor.

5. **Helotium consobrinum** Boud., Icon. Mycol. t. II, pl. 488 (1907), 5484
Hist. et Classif. Discomyc. Europe (1907) p. 114. — Majus, 2-3 mm. altum, 1-1,5 mm. latum, luteum, pediculo pallidiore ad basim incrassatam albo-villosulo, cupula applanata margine integro, extus glabra; paraphysibus linearibus, ad apicem vix incrassatis, granulosis, lutescentibus, 3-4 μ . crassis; ascis octosporis, clavatis, 70-90 \approx 8-10; sporidiis fusoideis, extremitatibus æqualiter acutiusculis, albis, intus ad apices minutissime granulosis, hyalinis dein (spuriæ?) uni-septatis, 15-26 \approx 3-5.

Hab. in caulibus putrescentibus Rumicis, Montmorency Gallia. — Ab *H. virgultorum* et *H. scutula* differt sporidiis et pediculo basi incrassato.

6. **Helotium marmolense** Speg., Myc. Arg. IV, in An. Mus. Buenos Aires (1909) p. 445. — Pusillum, coccineum, tenue, sparsum, orbiculare, plane sessile, concaviusculum, 2-3 mm. diam., subcераceum, extus ferrugineum; ascis e cylindræo subclavulatis, apice obtusis 40-45 \approx 5, octosporis, breviter pedicellatis, filiformi-paraphysatis, jodo immutatis; sporidiis ellipsoideis, minutis, utrinque acutiusculis et minutissime 1-guttulatis, 8-10 \approx 3-4 hyalinis, lenissime inæquilateris.

Hab. ad ramos aridos putrescentes Macluræ aurantiacæ Marmol pr. Buenos Aires, Argentina.

7. **Helotium ascophanoides** (Boud.) Sacc. et Trav. — Syll. XIX p. 837 5486
Pachydisca ascophanoides Boudier, Icon. Myc. (1905) t. III, pl. 438, Hist. et Classif. Discom. Europe (1907) p. 93. — Minutissimum, sessile, 0,25-0,40 mm. latum, albido-ochraceum, subhyalinum, lenticulare, hymenio ascis granuloso; paraphysibus crassis, simplicibus, ad apicem subincrassatis, 4-4,5 μ . cr. intus minute granulosis, ad basim tantum septatis; ascis clavatis, octosporis, foramine marginato dehiscentibus, 80-90 \approx 12-13; sporidiis oblongis, albis, intus grosse granulosis, ad apices subobtusis, sæpe curvulis, 13-15 \approx 3,5-4.

Hab. in ligno populino putri, Montmorency, Gallia.

8. **Helotium Boudieri** Sacc. et Trott., *Calycella ochracea* Boud., Icon. Mycol. t. III, pl. 442 (1907), Hist. et Classif. Discomyc. Europe

(1907) pag. 95, non *Helot. ochraceum* (Grev.) Phill. — Minutum 1-1,5 mm. latum, ochraceo-fulvescens, vix stipitatum, cupulis subconcavis, levibus, varie undulatis, hymenio vix saturatiore; paraphysibus linearibus ad apicem subincrassatis, simplicibus aut divisis, intus granulosis, hyalinis, 2 μ . cr.; ascis clavatis, octosporis, 140-150 \times 8-10; sporidiis hyalinis, fusoideis aut fusoideo-clavatis, intus vix granulosis, 6-10 \times 3-4.

Hab. in ligno corylino putri, Montmorency, Gallia.

9. *Helotium conscriptum* Karst — Syll. VIII, p. 231 — var. *oblongisporum* Rehm, Sydow, Ann. Mycol. V (1907) p. 397; Mycoth. germ. n. 601. — Ascis cylindraceis, 90-120 \times 7-9, octosporis; sporidiis oblongo-cylindraceis, rectis, utrinque rotundatis, continuis, utroque apice minime guttulatis, hyalinis, 12-15 \times 4-5, monostichis.

Hab. ad ramulos Salicis cinereæ emortuos, Buch pr. Bernau Germania (H. SYDOW). — Sporidiis oblongatis nec ovoideis a typo dignoscitur.

10. *Helotium sparsum* Boud., Icon. Mycol. t. III, pl. 495 (1907), Hist. et Classif. Discomyc. Europe (1907) p. 111. — Minutum, album 0,5-1,5 mm. latum, breviter stipitatum, pediculo concolore; ascis sat amplis, clavatis, octosporis, 120-125 \times 14; paraphysibus linearibus, ad apicem granulosis, albis, 4-5 μ . cr.; sporidiis oblongo-fusoideis, ad apices intus granulosis, albis, 15-21 \times 5-6, sæpe curvulis.

Hab. ad folia quercina putrida, Montmorency, Gallia. — *H. amenti* affine, a quo differt statura majori, sporidiis diversis; ab *H. annulari* differt pediculo brevi sed distincto.

11. *Helotium Humuli* (Lasch) De Not. — Syll. VIII, p. 243 — var. *minusculum* Rehm, in Jaap, Fungi sel. exsicc. n. 363, Abh. Bot. Ver. Prov. Brandenb. LII (1910) Extr. p. 5. — A typo differt imprimis ascomatibus minoribus, tenuioribus, longius stipitatis et lætius rubello-coloratis.

Hab. in caulibus Humuli Lupuli dejectis, prope Triglitz Germaniæ.

12. *Helotium niveum* Kirschst., Verh. Bot. Ver. Brandenb. XLVIII (1906) p. 44. — Ascomatibus solitariis, pedicello 1-2 mm. long., 1 mm. cr. pruinoso præditis, ceraceis, primum albo-niveis, siccis flavescentibus, late apertis et mox fere pileato-revolutis, acute marginatis, 1 mm. circ. diam.; ascis subclavatis, 50-70 \times 4-5 basi in pedicellum elongatis, supra rotundatis, octosporis, oblique mono-

v. distichis, hyalinis, unilocularibus, fusoideis, 6-9 \approx 2-3, biguttulatis; paraphysibus filiformibus 1,5 μ . cr.

Hab. in foliis pineis putrescentibus, in silvis prope Rathenow Germaniæ.

13. *Helotium musicola* Spegazz., Myc. Arg. IV in An. Mus. Buenos Aires (1909) p. 446. — Pusillum, cinerescens, sessile, in macula albida situm, laxe gregarium, 0,5-0,8 mm. diam., extus olivaceum, planiusculum, margine integerrimo; ascis subclavatis, apapophysatis, octosporis, breviter noduloso-pedicellatis, 60-65 \approx 10-14, jodo fere immutatis; sporidiis ex elliptico subovatis, minutis, utrinque obtusulis, 10-12 \approx 5-6, hyalinis, non v. grosse 2-guttatis.

Hab. ad folia et petiolos Musæ paradisiacæ in hortis pr. Orán, Argentina.

14. *Helotium citrinulum* Karst. — Syll. VIII, p. 288 (*Pezizella*) — 5493 var. *Seaveri* Rehm, Ascom. (1906) n. 1634, Ann. Myc. IV (1906) p. 67. — Ascomatibus dispersis sessilibus, primitus globoso-clausis, mox patellariformiter apertis, disco orbiculari, tenuiter marginato, citrino-flavo, 0,5-4 mm. diam., extus glabris, albidis, versus basim subangustatis, excipulo prosenchymatice contexto, ceraceis, senilibus subplicatis crassiusque marginatis, siccis disco aurantio-flavo; ascis clavatis, apice rotundatis, 40-45 \approx 5-7, octosporis; J +; sporidiis fusoideis, rectis v. subcurvatulis, utrinque acutatis, 1-cellularibus, hyalinis, 7-10 \approx 1,5, distichis; paraphysibus filiformibus, hyalinis, 1 μ . cr.

Hab. ad calamos siccos Caricis? in locis rupestribus, Iowa City Iowa U. St. Amer. (F. J. SEAVER).

15. *Helotium fulvidulum* (Boud.) Sacc. et Trav. — Syll. XIX, p. 838, 5494 *Pachydisca fulvidula* Boud., Icon. Mycol. t. III, pl. 439 (1907), Hist. et Classif. Discomyc. Europe (1907) p. 94. — Minutum, 1,5-3 mm. latum, sessile aut brevissime crasseque stipitatum, cupulis convexis, adultis sublobatis, fulvis, extus ad basim nigricantibus; ascis elongato-claviformibus, octosporis, foramine marginato jodo vix cærulescente, 120-140 \approx 14-15; paraphysibus septatis, ad apices non incrassatis, 3-4 μ . cr., intus granulis oleosis fulvis sæpe confluentibus repletis; sporidiis oblongo-fusoideis, albis, rectis aut parum curvulis, intus guttulis oleosis albis 2-4 aut multis repletis, 20-28 \approx 5-6.

Hab. ad terram inter Gramina et Carices, locis udis in silva Montmorency, Gallia.

16. *Helotium Bambusæ* v. Höhnelt, Ergebn. Bot. Exp. Südbres. 1901, 5495

Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. p. 33.
— Ascomatibus sparsis, lenticularibus, disco parum prominenti, 1,5-3 mm. diam. et stipite 0,5 mm. longo, crassiusculo præditis, griseo-brunneolis, extus obscurioribus et radiatim striatis, plectenchymatico-fibrosis, brunneis; ascis longe pedicellatis, tunica tenui donatis, $120 \approx 6-6,5$, octosporis; paraphysibus filiformibus, numerosis, supra brunneolis et leniter clavatis, usque ad 3 μ . cr.; sporidiis supra distichis, hyalinis, guttulatis, elongato-cylindraceis, utrinque obtusulis, $8-10 \approx 2,5-3$; J +.

Hab. in culmo Bambusæ, Bertiago prope Santos, Sao Paulo in Brasilia.

17. *Helotium carneolum* Speg., Myc. Argent. IV in An. Mus. Buenos Aires (1909) p. 445. — Ascomatibus lenticularibus, subsessilibus, parvis, ceraceis, carneis, 0,5-1 mm. diam., inferne subturbinatis, supra convexulis, margine acuto integerrimis; ascis subclavulatis, apice obtuse rotundatis, crasse noduloseque pedicellatis, $50 \approx 7-8$, octosporis, interdum tetrasporis, parce filiformi-paraphysatis; sporidiis navicularibus, 2-guttulatis, in asci parte super. conglobatis, utrinque acutiusculis, levibus, $8-9 \approx 2$.

Hab. ad folia dejecta putrescentia Arundinis Donacis in silva Santa Catalina pr. Buenos Aires Argentina.

18. *Helotium crastophilum* Sacc., in Ann. Mycol. X (1912) p. 312. — 5497
Subsparsum, ceraceum, totum albido-flavidum, minutum, stipitato-infundibuliforme, glabrum; cupula 300-400 μ . alta, 250 μ . lata, etiam in sicco aperta, margine integro, contextu anguste prosenchymatico; stipite paullo obscuriore, cylindrico, $250 \approx 80-90$; ascis cylindraceis, breve stipitatis, apice rotundatis, paraphysibus filiformibus, copiosis obvallatis, octosporis, $110-130 \approx 12-14$; sporidiis oblique monostichis, navicularibus, utrinque obtusule tenuatis, $20 \approx 5-6$, granuloso-guttulatis, hyalinis.

Hab. in culmis putrescentibus dejectis, Lyndonville New York Amer. bor. Oct. 1911 (FAIRMAN). — A speciebus graminicolis probe diversum.

19. *Helotium tetrascosporum* Rea, Trans. Brit. Myc. Soc. 1908, v. III 5498 (1909) p. 129. — Ascomatibus stipitatis, cupuliformibus 1,5-2 mm. alt., 0,5 mm. latis, disco ochraceo, extus pallidioribus, glabris, marginibus inflexis; substantia subconcolori, ceraceo-subgelatinosa; ascis clavatis, J -, constanter tetrasporis, $125-130 \approx 8-9$, paraphysibus filiformibus, ramosis, septatis, apice leniter subincrassatis, $145-155 \approx 1-1,5$; sporidiis oblongo-ellipsoideis, hyalinis, primo conti-

nuis, triguttulatis, monostichis, dein maturis distichis, biseptatis, 21-27 \approx 3,5-4,5.

Hab. ad culmos siccos Phalaridis arundinaceæ prope Perth Britannia (J. MENZIES).

20. *Helotium* ? *phæolomum* (Lév.) Sacc. et Trott., *Peziza phæoloma* 5499
Lév. in Demid. p. 97, t. IV, f. 7. — Gregarium, 1 mm. altum, obconicum, nudum; disco concavo fuscescente, margine præminente saturatius fusco; stipite brevissimo crasso albicante.

Hab. in culmis Andropogonis? (*racine à balais*) Skuloni in Tauria.

21. *Helotium pezizoideum* Cooke — Syll. X, pag. 9 — var. *quadri-* 5500
nucleatum Starb. Ascom. Schwed. Chaco-Cordill. Exp., Arkiv f. Bot. Bd. V (1905) pag. 4. — Ascomatibus gregariis vel sparsis, turbinatis, deinde applanatis, citrinis; ascis anguste clavatis, sursum rotundatis, longissime pedicellatis, 75-90 \approx 5-5,5; sporidiis octonis, mono- vel distichis, clavulato-fusoideis, quadri-nucleatis, 7,5-9 \approx 2.

Hab. in ligno mucido, Tatarenda Gran Chaco, Bolivia.

22. *Helotium aurantiacum* Gill. Champ. de France, Discom. (descri- 5501
ptio deest in textu) fig. 74. — Ascomatibus solitariis v. binis connexis, valde irregularibus, brevissime stipitatis; disco convexo e rubescenti aurantiaco, ambitu plano (non marginato) demum varie inciso-lobato; stipite brevissimo crasso obconico, in disci partem inferiorem albam sensim abeunte et itidem albo; ascis cylindraceis, apice rotundatis, deorsum sensim tenuato-stipitatis, octosporis; paraphysibus filiformibus 1-2-furcatis; sporidiis oblique monostichis ovoideis, apice altero rotundato, altero acutato, pluriguttulatis, hyalinis.

Hab. in fragmentis ligneis in Gallia. — Videtur species majuscula (ex icone circ. 1 cm. lata) et macrospora, tamen dubia.

23. *Helotium subrubescens* Rehm, Ann. Mycol. VII (1909) p. 524, 5502
Ascom. Exsicc. fasc. 45, n. 1852. — Ascomatibus gregariis, interdum pluribus arcte congregatis, in cortice incrassato ramuli terræ infossi putrescentis sessilibus, primitus globoso-clausis, dein cyathoideis, crasse marginatis, 1-4 mm. diam., siccis complicatis involutisque, in stipitem versus basim tenuiorem, cylindraceum, subcurvatum, 1-2 cm. longum, 0,5-1 mm. lat. abeuntibus, extus glabris, dilute rubescentibus, siccis dilute alutaceis, albido-pruinosis, ceraceis, prosenchymatice contextis; ascis cylindraceo-clavatis, apice rotundatis, 60 \approx 5, octosporis, jodo cærulescentibus; sporidiis

bacillaribus v. subclavatis, rectis, 1-cellularibus, hyalinis, $7-8 \approx 1,5$, distichis; paraphysibus filiformibus, subacutatis, paullulum prominentibus, hyalinis, $2-2,5 \mu$. cr.

Hab. in ramulo putrescente, Madison Wisc. Amer. bor. (B. A. DODGE).

24. *Helotium obconicum* von Höhnelt, Sitzb. k. Ak. d. Wiss. Wien 5503

CXVIII, Abt I (1909) p. 389, cum icon. — Ascomatibus sparsis, raro binatis, obconoideo-turbinatis, disco concavo, basi breviter angustatis, pallide flavo-ceraceis, disco obscuriore, $2-2,5 \approx 1,5-2$ mm., margine obtuso crassiusculo, sicco subrevoluto; excipulo 50μ . circ. cr. ex hyphis hinc inde extus filiformiter prominentibus; hymenio 150μ . cr.; hypothecio 1 mm. circ. cr. laxe subspongioso, plectenchymatico; ascis cylindraceo-clavatis, supra angustatis obtusis, basi in pedicellum brevem crassum tenuatis, $125-140 \approx 11-12$, octosporis; paraphysibus filiformibus $1,5 \mu$. cr. apice obtusulis, crassiusculis, ascum parum superantibus; sporidiis subdistichis, hyalinis, ellipsoideo-fusoideis, apice obtusulis v. subacutatis, plerumque grosse biguttulatis, tenuiter tunicatis, unilocularibus, $17-24 \approx 6-7$, J +.

Hab. in ligno duro putri dejecto, Tjibodas in insula Java. —
— *Hel. subturbinato* P. Henn. affine.

25. *Helotium Marchantiae* (Berk.) Fr. — Syll. VIII, p. 246 — var. 5504

Conocephali Böyd. Trans. Br. Myc. Soc. III, 1908, 2, p. 113 (1909). — Ascomatibus magnitudine variabilibus, primum pallidis, dein obscure brunneis, plerumque in maculis pallidis insidentibus; sporidiis oblongis fusoideis, latiusculis, $18-21 \approx 5$; paraphysibus in massa brunneolis.

Hab. ad thallum *Conocephali conici*, Dalry Ayrshire, Britannia. — A typo differt sporidiis latoribus et maculis albicantibus matricis.

26. *Helotium amœnum* (Pat.) Sacc. et Trott., *Pachydisca amœna* Pa- 5505

touill., Bull. trim. Soc. Myc. de France, vol. XXI (1905) p. 120. — Ascomate carnosio, molli, $0,5-1,5$ mm. diam., roseo-pallido vel violaceo, glabro, cylindraceo, apice truncato, primum plano dein leniter depresso, demum convexo et parum expanso; ascis cylindraceis sensim in basim attenuatis, apice truncatis et poro marginato dehiscentibus, jodi ope non cyanescentibus, $60-90 \approx 8-10$, 8-sporis; paraphysibus copiosis, rectis, cylindraceis, 2μ . cr., hyalinis, simplicibus, guttulis refringentibus præditis; sporidiis distichis, ovoideis, hyalinis, levibus, $6-8 \approx 3-4$, granulatis.

Hab. parasitica ad thallum *Ricciæ* sp., Alger, Algeria Africae bor. (TRABUT). — *Pezizellæ* (*Epiglicæ*) *glæocapsæ* affine.

27. *Helotium chordicola* Speg., Fungi Arg. IV, in An. Mus. Buenos Aires (1909) p. 445. — 5506

Ascomatibus sessilibus, subceraceis, subminiatis, parvulis, laxè gregariis, orbicularibus, 2-3 mm. lat., margine integerrimis, planiusculis; ascis linearibus 50-55 \approx 5, octosporis, modice tenuato-pedicellatis, paraphysibus capitato-clavulatis obvallatis; sporidiis elongato-ellipsoideis, subrectis, oblique monostichis, utrinque acutiuscule rotundatis, 6-8 \approx 3-3,5, hyalinis, eguttulatis.

Hab. in chorda putrescente inter folia delapsa, La Plata, Argentina.

28. *Helotium griseolum* von Höhnelt, Sitzb. k. Akad. d. Wiss. Wien 5507

OXVIII, Abt. I (1909) p. 388. — Ascomatibus arcte gregariis, sæpe compluribus adnatis, 400-500 μ . diam., disco pallide v. obscure griseo, depresso, extus griseolis, basi obscurioribus, stipite 200-250 \approx 100-150; contextu subprosenchymatico, hypothecio crasso; excipulo extus breviter ob hyphas prominentes inflatas molle verruculoso; ascis clavatis longe pedicellatis, octosporis, tenuiter tunicatis, 65-68 \approx 5-6; sporidiis mono- v. distichis, hyalinis, unilocularibus, elongato-ellipsoideis, acutis v. obtusulis, 5-6 \approx 1,5-2; J +.

Hab. in hymenio Polypori concrenentis vetusti, Tjibodas in ins. Java.

29. *Helotium albo-fuscidulum* Rehm, Oesterr. Botan. Zeitschr. LVI 5508

(1906) p. 346. — (Nomen nudum).

Hab. in caulibus emortuis Aconiti sp. Schrofenspass Tiroliae.

PHIALEA (Fr.) Gill. — Syll. VIII p. 251, X p. 9, XI p. 403, XIV p. 765, XVI p. 727, XVIII p. 54.

1. *Phialea turbinata* Syd., Ann. Myc. V (1907) p. 397; Mycoth. germ. 5509

599. — Ascomatibus plerumque gregariis, rarius sparsis, primo clausis, dein apertis, eximie turbinatis, disco pallido tenuiter marginato, extus parte cupulae superiore pallida, parte cupulae inferiore atro-grisea, levibus, siccis vix complicatis, 0,2-0,5 mm. latis, ceraceis; stipite 0,3-0,55 mm. alto, 90-150 μ . crasso, basi leniter crassiore ibique 120-180 μ . crasso, superne atro-griseo, inferne dilutiore, levi, vix striato; ascis cylindraceis, apice rotundatis, 35-40 \approx 4-5 $\frac{1}{2}$, octosporis; sporidiis bacillaribus, continuis, hyalinis, plerumque rectis, 7-8 $\frac{1}{2}$ \approx 1 $\frac{1}{2}$ -2 $\frac{1}{2}$, paraphysibus filiformibus, ascos parum superantibus.

Hab. in caulibus putrescentibus *Ranunculi* spec. Eube pr. Gersfeld, prov. Hessen-Nassau Germaniæ.

2. *Phialea cyathoidea* (Bull.) Gill. — Syll. VIII, pag. 251 — var. 5510
minor Rehm, in Bubák Bull. Herb. Boiss. 2 sér. VI (1906) p. 398.
 — Ascomatibus circ. 0,5 mm. alt., 0,3-0,45 mm. latis, humidis brunneolis, siccis fere brunneis; stipite 0,15-0,2 mm. longo, circ. 0,085 mm. cr.; ascis 40-45 \times 4-4,5; sporidiis 7-9 \times 1,5.

Hab. in caulibus senioribus *Ranunculi* Villarsii, prope Andrijevica sub Hasanac Planina 1000-1400 m. alt. Montenegro.

3. *Phialea stannarioides* Rehm, Ann. Mycol. V (1907) pag. 534. — 5511
 Ascomatibus gregariis, sessilibus, primitus subglobosis, dein disco explanato orbiculari, plano vel convexulo, tenuiter marginato, 0,2-1 mm. diam., brevissime cylindraceo-stipitatis, 0,5 mm. alt., dilutissime lutescentibus, glabris, primitus subgelatinosis, excipulo pro-senchymatico; ascis clavatis, apice rotundatis, subcurvatis, 150-160 \times 10-12, octosporis, jodo immutatis; sporidiis subfusiformibus, obtusis, subcurvatis, 1-cellularibus, utroque apice guttulatis, hyalinis, 15-18 \times 5, distichis; paraphysibus filiformibus, hyalinis, circ. 2,5 μ . lat.

Hab. ad caules putrescentes *Aconiti* variegati, Scheideck infra montem Virginis Helvetiæ (REHM). — Prima ætate subgelatinosa, hinc ad *Stannariam* nutans.

4. *Phialea Lychnidis* Ces. ap. Klotzsch, Herb. viv. mycol. n. 1616 5512 (1852).

Hab. ad caules *Lychnidis* dioicæ, Vercelli Ital. sup. — Ex Rabenh. forma *Phialeæ cyathoideæ*.

5. *Phialea bicolor* Starb. — Syll. XIV, pag. 765 — var. 5513
alpestris Rehm, Ascom. Exsicc. fasc. 46, n. 830 b, Ann. Mycol. (1910) p. 303. — Stipite crasso, multo pallidiore, demum longitudinaliter plicato; J —.

Hab. in caulibus *Arniciæ* montanæ, Söllereck Algoviæ Germania.

6. *Phialea phyllophila* (Desm.) Gill. — Syll. VIII, pag. 274 — var. 5514
Jaapii Rehm, in Jaap Abh. Bot. Ver. Prov. Brandenb. II (1907) p. 10. — A typo differt præcipue sporidiis eguttulatis.

Hab. ad nervos foliorum *Populi canadensis* pr. Triglitz in Brandenburgia.

7. *Phialea minutula* Bres. in Strasser, III Nachtr. Pilz. Sonntagb. 5515 (Verhandl. zool. bot. Gesell. Wien 1905, p. 612). — Ascomatibus gregariis, stipitatis, minutissimis, vix 0,5 mm., cum stipite, altis,

albis, margine pruinosis; hymenio concolore; stipite stramineo; ascis clavatis, $36-40 \times 4,5-5$, jodo poro caerulescentibus; paraphysibus filiformibus; sporidiis subfusoides, $5-7 \times 2,5$.

Hab. ad ligna mucida arborum frondosarum, Sonntagsberg Austriae inf.

8. *Phialea obscura* P. Henn., Engl. Jahrb. XXXVIII (1905) p. 116. 5516

Ascomatibus sparsis, ceraceo-membranaceis v. subcoriaceis, stipitatis, cupulatis, extus cinereo-fuscis, pruinosis, venosulo-rugulosis; disco concavo, levi, atro-fuscidulo, $2-2,5$ mm. diam.; stipite tereti, farcto, fusco-cinereo, pruinoso, $1-2$ mm. long.; ascis cylindraco-clavatis, obtusis, octosporis, $40-45 \times 4$, paraphysibus filiformibus, c. 2 μ . cr., hyalinis, intus fuscidulo-granulatis; sporidiis oblique monostichis v. subdistichis, oblongo-fusoides, rectis vel curvulis, utrinque acutiusculis, intus fuscidulo-granulatis, hyalinis, $7-8 \times 2,5$.

Hab. in cortice arborum, Amani Ost-Usambara Africae centr. (EICHELBaum).

9. *Phialea Queletii* Sacc. et Trav. — Syll. XX, pag. 331 — *Peziza* 5517

gracilis Quél. Champ. Jura et Vosg. II, p. 406, t. V, f. 6 (1873), non Cooke et Peck, *Phialea gracilis* Gill. Champ. Fr. Discom. p. 99, fig. 172. — Ascomatibus stipitatis; stipite filiformi, $2-3$ cm., long., pallide griseo; cupula ceracea, tenui, pruinosa, urceolata, dein concava, demum applanata, 1 cm. lata, cinereo-pallida, albo-marginata; disco cremeo-griseo; ascis cylindracois deorsum leviter tenuatis, octosporis; sporidiis oblique monostichis, ellipsoideis vel pruniformibus, 10 μ . longis.

Hab. in ramulis dejectis foliis obtectis, Jura Galliae.

10. *Phialea euspora* Rick, Broteria V (1906) p. 35. — Ascomatibus 5518

convexo-depressis, crassiusculis, margine recto, plerumque integro, regulariter orbicularibus, flavis, usque ad 4 mm. latis, hymenio cereo, subtiliter velutino, separabili ab hypothecio, extus albidis, rugosis, sericeis, in stipitem $1-2$ mm. longum, crassum et pubescentem, basi nigra, abeuntibus; ascis $170-180 \times 12$; sporidiis ellipsoideis v. rotundatis, 12×6 , grosse uniguttulatis, unilocularibus, uniserialibus; paraphysibus hyalinis, filiformibus, paucis.

Hab. ad folia putrida, marginem et petiolum sequens, Rio Grande do Sul Brasiliae. — Sporid et hymenio imitatur *Eupezizas*, modo vegetandi *Phialeam Sydowianam*.

11. *Phialea scutula* (Pers.) Gill. — Syll. VIII, p. 266 — var. epi- 5519

calamia (Karst.) Sacc. Fungi ital. fig. 1339, *Helotium scutula* var. *epicalamium* Karst. Myc. Fenn. I, p. 111 (1871), *Michelia* I, p. 427.

— Typo subsimilis sed multo minor et gracilior; sporidiis aciculari-elongatis, rectis curvulisve, $19-24 \times 3-4$, bi-quadriguttatis.

Hab. ad calamos *Typhæ latifoliæ* in Fennia et graminum majorum, Conegliano et Sermide Ital. bor.

12. *Phialea nivalis* Rehm, Ann. Myc. III (1905) p. 411 et Ascom. 5520
exsicc. fasc. 35, n. 1606. — Ascomatibus dispersis, plerumque solitariis, sessilibus, globuloso-cyathoides, in stipitem brevissimum elongatis, glabris, albidulis, versus marginem fuscidulis, demum dilute fuscis, $200-210 \mu$. diam. et alt., prosenchymaticis, siccis globoso-involutis, extus subfarinaceis; ascis cylindraceis, apice subacutatis, sessilibus, $50-55 \times 6-8$, octosporis, poro jodo dilute tincto; sporidiis fusiformibus, rectis vel subcurvatis, 1-cellularibus, hyalinis. $12-15 \times 3$, distichis; paraphysibus filiformibus, hyalinis, $2,5 \mu$. lat., ascos superantibus.

Hab. ad folia graminea putrida inter *Rhododendra* ferr. in suprema parte vallis Zillerthal Tirolia (Dr. REHM). — Minutie ascomatum et sporidiorum a *Ph. culmicola* mox distinguenda.

13. *Phialea incertella* Rehm in Sydow, Myc. germ. n. 505 et Ann. 5521
Myc. IV (1906) pag. 485. — Ascomatibus plerumque gregariis, cyathoides, primitus clausis, dein urceolatis, disco subhyalino, tenuissime, haud pruinose marginato, in stipitem crassum brevissimum elongatis, $0,2-0,25$ mm. latis et altis, excipulo glabro, fusco, prosenchymatico, siccis nigro-fuscidulis; ascis clavatis, apice rotundatis, $30-40 \times 5-6$, octosporis, poro jodi ope tincto; sporidiis fusiformibus, rectis, utrinque acutatis, 1-cellularibus, hyalinis, $5-6 \times 1\frac{1}{2}-2$, distichis; paraphysibus partim apice lanciformiter acutatis, hymenium longe superantibus, in medio $5-7 \mu$. latis, partim filiformibus, hyalinis, 2μ . latis.

Hab. ad folia emortua *Koeleria cristatæ*, prope Erfurt (H. DIEDICKE). — Proxima *Ph. eburnea* Rob. et Desm. colore dilutiore, sporidiis (sec. Karsten in Hedwigia 1893, p. 69) modo $4-6 \times 0,5$ diversa.

14. *Phialea epibrya* v. Höhnelt, Fragm. z. Mykol., Sitzb. k. Ak. d. 5522
Wiss. Wien, Bd. CXVI, Abt. I (1907) pag. 136. — Ascomatibus sparsis, solitariis, subsessilibus, obconoideis, depressis v. concaviusculis, $420-450 \mu$. latis, breviter pallideque marginatis, e rubido vitellinis, glabris, ceraceis; contextu minute fibroso-parenchymatico, e rosaceo flavido; ascis octosporis, sessilibus, clavatis, $50-60 \times 8-9$, paraphysibus filiformibus $1,5-2 \mu$. cr. obtusis obsitis; sporidiis hyalinis, distichis, elongatis v. subclavatis, rectis v. vix curvulis,

unilocularibus, minute granuloso-farctis, eguttulatis, 12-18 \approx 3-4, utrinque obtusis; excipulo tenui.

Hab. in foliis *Hypni* sp. prope Saar Moravia, Austria.

15. *Phialea gibba* (A. S.) Sacc. VIII, p. 271 est *Cyphella infundibuliformis* (Schäff.) Fr. — Syll. VI, p. 668 — seu *Omphalia gibba* (A. S.) Pat. Ic. n. 560, nec discomyceta.

PEZIZELLA Fuck. — Syll. VIII p. 275, X p. 10, XI p. 405, XIV p. 768, XVI p. 729, XVIII p. 57.

1. *Pezizella lanceolato-paraphysata* Rehm, Ann. Mycol. VI (1908) 5523 p. 316. — Ascomatibus gregariis, sessilibus, primitus globoso-clausis, dein disco orbiculariter expanso, plano, tenuissime marginato, flavidulo, 0,3-0,8 mm. diam., siccis irregulariter contractis, versus basim angustatis, albidulo-marginatis; excipulo pseudoparenchymatico, versus marginem non dilacerato, glabro; ascis clavatis, apice rotundatis, 30 \approx 5-7, octosporis, jodo immutatis; sporidiis clavatis, rectis, hyalinis, 1-cellularibus, 6-8 \approx 2, distichis; paraphysibus lanceolato-acutatis, longe prominentibus, hyalinis.

Hab. ad caules siccos *Spirææ Filipendulæ*, Lyndonville New York Amer. bor. (Dr. FAIRMAN). — A *Pez. deparcula* et *Helotio scrupuloso* probe distincta.

2. *Pezizella epidemica* Rehm, Ann. Mycol. III (1905) p. 225, Ascom. 5524 exs. n. 1581. — Ascomatibus in hypophyllo demum maculatim flavescente gregariis, sessilibus, primitus globoso-clausis, dein patellaribus, disco plano distincte marginato, versus basim fuscidulam angustatis, glabris, hyalino-flavidulis, 200-300 μ . diam., siccis albidulis vel dilute brunneolis, excipulo pseudoprosenchymatice tenuiter contexto, versus marginem discretis cellularum seriebus, 3 μ . cr., ad apicem obtusis instructo; ascis clavatis, apice rotundatis, jodo immutatis, 50-60 \approx 9-10, 8-sporis; sporidiis ellipsoideis, 1-cellularibus, guttas 2 oleosas includentibus, hyalinis, 8-10 \approx 4-5, distichis; paraphysibus filiformibus, septatis, hyalinis, 1,5 μ . versus apicem 2-3 μ . cr.

Hab. ad folia viva *Epilobii angustifolii* in cacumine montis Fichtelberg Erzgebirg W. KRIEGER). — Affinis *Pezizellæ minutissimæ* (Karst.) Rehm = *Mollisia minutissima* Karst. — Syll. VIII, p. 327.

3. *Pezizella Elasticæ* Koord., Botan. Untersuch., (1907) pag. 161. — 5525 Ascomatibus gregariis, ceraceo-membranaceis, tenuibus, discoideis,

subsessilibus, glabris, levibus, aurantiaceis, in sicco fuscescentibus, 0,6-0,9 mm. diam.; ascis tereti-clavatis, apice haud incrassatis, 40-55 \times 3-4, filiformi-paraphysatis, octosporis; sporidiis fusiformibus 8-8,5 \times 1,5-2, continuis, hyalinis, utrinque acuminatissimis.

Hab. in foliis emortuis Fici elasticæ prope Loano prov. Kedu Java (KOORDERS).

4. **Pezizella platensis** Spegazz., Myc. Arg. IV, in An. Mus. Buenos Aires (1909) p. 446. — Parva, tabacina, sessilis, subrigidula, sparsa, uda applanato-expansa, 0,5-1,5 mm. diam., sicca contracto-subglobosa, disco atro-plumbeo, margine acuto, integro; ascis subclavatis, aparaphysatis, apice rotundatis deorsum tenuatis modiceque pedicellatis, 60 \times 4-5, octosporis, jodo immutatis; sporidiis parvis, fusoido-subcymbiformibus, utrinque acutiusculis, mono- v. distichis, 8-10 \times 2-2,5, hyalinis, eguttulatis.

Hab. ad ramos corticatos Casuarinæ strictæ putrescentes in Parque La Plata, Argentina.

5. **Pezizella hyalino-sulphurea** Rehm in Bachman, Proceed. Ohio State Ac. of Sc. v. V, P. II (1909) n. 14, pag. 56. — Ascomatibus in superiore folii pagina dispersis, sessilibus, primitus globoso-clausis, dein patellaribus, disco plano tenuissime marginato, extus glabris, versus basim angustatis, hyalino-sulphureis, 200-250 μ . diam., excipulo pseudoparenchymatice contexto, ad marginem cellulis 8 \times 1,5 elongatis, obtuse fimbriato, siccis citrinulis, concavis; ascis clavatis, apice rotundatis, 25-30 \times 5-6, jodo caerulescentibus, 8-sporis; sporidiis oblongis, rectis, utrinque rotundatis, 1-cellularibus, hyalinis, 5-7 \times 2-2,5, distichis; paraphysibus filiformibus, hyalinis 2 μ . crassis.

Hab. ad folium putridum Fagi, Oxford O., Amer. bor.

6. **Pezizella Jaapii** Rehm, in Jaap Abh. Bot. Ver. Prov. Brandenb. IL (1907) p. 9. — Ascomatibus gregariis, sessilibus, primum globoso-clausis dein rotundato-apertis expansis, tenue marginatis, flavis; excipulo basi subnodoso, extus levi, parenchymatico, pallido, margine hyphis obtusis flavidis 4 μ . cr., siccis albo-flavis prædito 0,3-0,7 mm. diam.; ascis elongato-clavatis, supra rotundatis 30-35 \times 4-5, tetrasporis, J +; sporidiis fusoides v. acicularibus, supra subobtusis, rectis v. leniter curvulis, unilocularibus, hyalinis, 15-17 \times 1,5-2, distichis; paraphysibus filiformibus, septatis, obtusis, hyalinis, 1,5 μ . cr.

Hab. in foliis putrescentibus Betulæ verrucosæ nec non in foliis Populi, Quercus, Fagi prope Triglitz in Branden-

burgia. — *Pez. leucellæ* (Karst.) Sacc. affinis, sed differt colore et ascis tetrasporis.

7. *Pezizella Fairmani* Rehm, Ann. Mycol. V (1907) p. 519. — Asco- 5529
matibus dispersis, sessilibus, primitus globosis, dein explanatis, disco orbiculari tenuissime marginato, extus glabris, 250-270 μ . d., hyalino-subflavidulis, siccis plerumque convolutis, flavidulis, excipulo tenuissimo prosenchymatico; hyphis ad marginem subelongatis, obtusis, 4 μ . cr.; ascis clavatis, apice rotundatis, 30-35 \times 6-8, octosporis, jodo immutatis; sporidiis ovoideis, 1-cellularibus, hyalinis, 6-7 \times 3, distichis; paraphysibus filiformibus, versus apicem 3 μ . cr., hyalinis.

Hab. in ligno *Tsuga canadensis*, Lyndonville New York Amer. bor. (FAIRMAN). — *Pulchella* exigua species.

8. *Pezizella virens* (A. et S.) Rehm Disc. p. 662, *Peziza virens* Alb. 5530
et Schw. Fung. Lusat. p. 338, t. X, f. 10, Cooke Grevillea III (1875) t. 51, fig. 257. — Ascomatibus minutis, sparsis v. gregariis, crustula effusa obsolete virescente insertis, disco regulari, albido v. dilute rubescente, levi, tenuiter marginato præditis, subdiaphanis, siccis albis.

Hab. in truncis cavis putrescentibus Pinorum in silvis umbris Lusatiae. — Observante cl. Rehm, forte congruit cum *Micarcea prasina* Fr. lichenibus adscripta, quæ gaudet ascis clavatis, octosporis, sporidiis oblongo-ovoides, continuis dein bicellularibus, hyalinis 9-11 \times 3.

9. *Peziza subcinerea* Rehm, Ann. Mycol. V (1907) p. 519. — Asco- 5531
matibus dispersis, sessilibus, primitus globoso-clausis, dein disco orbiculari, tenuiter marginato, plano, hyalino, 0,5-2 mm. diam., extus glabris, cinereo-hyalinis, siccis subinvolutis, excipulo parenchymatico hyalino, versus marginem ex hyphis elongatis contexto, hyphis marginalibus haud distantibus, obtusis; ascis clavatis, ad apicem rotundatis, 50 \times 5-7 octosporis, jodo cærulescentibus; sporidiis oblongis, utrinque obtusis, 1-cellularibus, rectis vel subcurvatis, hyalinis, 6-7 \times 2, distichis; paraphysibus hyalinis, 3 μ . cr.

Hab. ad lignum mucidum, Madison Amer. bor. (HARPER). — *Pezizella carneo-flavæ* affinis sed colore sporidiisque plane distincta.

10. *Pezizella obscurata* Rehm, Contr. Myc. Hung. (Növ. Közl. 1905, 5532
p. 5). — Ascomatibus dispersis, sessilibus, primitus globoso-clausis, dein urceolatis, tenuissime marginatis, olivaceis, extus glabris, excipulo ad basim parenchymatico, supra prosenchymatico, fusco-

flavidulo, 0,2-0,3 mm., ceraceis, siccis corrugatis, nigris; ascis clavatis, apice rotundatis, 40-45 \times 5-6, octosporis, jodo immutatis; sporidiis oblongis, obtusis, utroque apice guttulatis, 1-cellularibus, hyalinis, 4-5 \times 2, distichis; paraphysibus filiformibus, hyalinis, 2-2,5 μ .

Hab. ad frustula lignea, Berencsfalu, prope Selmezbánya, Hungaria (KMET). — Proxima *Pezizellæ granulose* (Karst.) Rehm quoad formam, sed colore olivaceo, ascis jodo non tinctis et sporarum minutie plane diversa species.

11. *Pezizella rectispora* (Boud.) Sacc. et Trav. — Syll. XX, p. 321 5533

— *Hyalinia rectispora* Boud., Icon. Mycol. t. III, tab. 467, Hist. et Classif. Discomyc. Europe (1907) p. 103. — Minutissima 0,3-0,6 mm. lata, convexula, pallide cinereo-lutescens; ascis minutis, cylindricis, sæpe ad basim appendiculatis, octosporis, inoperculatis et ad apicem truncatis, 33-38 \times 2,5 μ , paraphysibus hyalinis, simplicibus aut divisis, tenuibus, ad apicem non capitatis, 1,5 μ . cr.; sporidiis bacillaribus, rectis, ramis subflexuosis, 7-9 μ . longis, 1,5 μ . cr., intus non granulosis.

Hab. ad folia putrida *Scirpi* silvatici in paludosis, Ecouen Galliæ.

12. *Pezizella fuscescens* Rehm, Verh. zool.-bot. Gesell. Wien LVII 5534

(1907) p. 329. — Ascomatibus in maculis brunneis rotundatis 1-2 cm. lat. hypophyllis sparse insidentibus, primum globoso-clausis, dein discum planum, rotundatum, raro parum prominentem, tenui-marginatum ostendentibus, extus glabris, brunneis, c. 300 μ . d. excipulo grosse parenchymatico, ad marginem ciliolatis, siccis, brunneis, quandoque albo-ciliatis, tenui-ceraceis; ascis clavatis, apice obtuse acutatis, 50-70 \times 10-12, octosporis, J +; sporidiis clavatis apice obtusis, crassis, rectis, unilocularibus (an demum uniseptatis?), utrinque uniguttulatis, hyalinis, 15-18 \times 3-3,5, distichis; paraphysibus filiformibus c. 2 μ . cr., hyalinis.

Hab. ad folia emortua *Caricis pendulæ* in silvis Sonntagberg Austriæ inf.

13. *Pezizella sepulta* Rehm, Ascom. exsicc. fasc. 37, n. 1653, Ann. 5535

Mycol. IV (1906) p. 405. — Ascomatibus dispersis, primitus clausis, dein patellaribus, disco orbiculari tenuissime marginato, plano, albo, excipulo glabro, hyalino, pseudoparenchymatice contexto, 150-200 μ . diam., siccis subglobosis; ascis clavatis, apice obtuse acutatis, late sessilibus, 20-25 \times 5-6, J +, octosporis; sporidiis fusoides, plerumque curvatulis, utrinque acutatis, unilocularibus, guttula o-

leosa utrinque præditis, hyalinis, $8-9 \approx 2$, distichis; paraphysibus filiformibus, 1 μ . cr., haud clavatis, hyalinis.

Hab. fasciculo putrescente Junci Hostii, Alpeiner-Alpe pr. Stubai Tyrolia (Rehm). — *Pezizellæ turgidellæ* (Karst.) Rehm affinis sed ascomatibus incoloribus, ascis minoribus.

14. *Pezizella subglacialis* Rehm, Hedwigia XXVIII (1889) p. 348. 5536

— Ascomatibus sessilibus, primitus globosis, clausis, dein urceolatis, demum patellaribus, 0,15-0,5 mm. lat., dilute flavidulis, siccis sæpe subfuscis et plicatis, disco hyalino; basi parenchymatice e cellulis minutis composita, versus marginem pseudoprosenchymaticis, hyalinis, subtus denique hyphis simplicibus, brevibus, 5 μ . lat., fuscis obsessis; ascis clavatis, apice obtuse acutatis, $45-50 \approx 6-7$, octosporis; sporidiis fusiformi-oblongatis, obtusis, rectis, unicellularibus, utroque apice plerumque guttulis oleosis instructis, hyalinis, $9-10 \approx 1,5-2$, distichis; paraphysibus filiformibus, haud clavatis, 2 μ . cr., hyalinis; poro ope J. cærulescente.

Hab. ad culmos putrescentes Nardi strictæ «Hochjoch» Oetz Tirolia.

15. *Pezizella tumidula* (Rob. et Desm.) Sacc. — Syll. VIII, p. 276 5537

— var. *Rhododendri* Rehm, Oesterr. bot. Ztschr. LVI (1906) p. 345. (Nomen nudum).

Hab. in foliis putrescentibus *Rhododendri hirsuti*, Schrofenspass Tirolia.

PSEUDOHELOTIUM Fuck. — Syll. VIII p. 291, XI p. 406, XIV p. 772, XVI p. 729, XVIII p. 63.

1. *Pseudohelotium minutellum* (Boud.) Sacc. et Trav. — Syll. XX, 5538

p. 536, *Hyaloscypha minutella* Boud., Icon. Mycol. t. III, tab. 522 (1907), Hist. et Classif. Discomyc. Europe (1907) p. 127. — Minutissima, 0,2-0,4 mm. lata, alba aut nivea, subhyalina, sessilis, margine subfimbriato; ascis octosporis, claviformibus, $65-70 \approx 10$, inoperculatis; paraphysibus filiformibus, ad apicem vix incrassatis, simplicibus aut ad basim divisis, 3 μ . cr.; sporidiis hyalinis, cylindrico-fusoideis, leniter curvatis, guttulis oleosis sat crassis extrematibus positis, farctis, $14-16 \approx 3-4$.

Hab. in ligno putri Cerasi, Montmorency, Gallia.

2. *Pseudohelotium Ulmaria* (Boud.) Sacc. et Trott., *Urceolella Ulma-* 5539

ria Boud., Icon. Myc. t. III, tab. 535 (1907), Hist. et Classif. Discomyc. Europe (1907) p. 129. — Minutissima, lutea, 0,2-0,3 mm. lata, sessilis, extus puberula, pilis acutis, flexuosis, non aut ad ba-

sim tantum septatis, intus granulosis, 15-40 \times 2-3; ascis minutis, sat amplis, octosporis, foramine immarginato, 30-40 \times 7-8; paraphysibus cylindricis, intus guttulis oleosis luteis repletis; sporidiis fusoides-elongatis, acutis, intus omnino granulosis medio minute vacuolatis, 15-18 \times 3.

Hab. in petiolis putrescentibus *Spirææ Ulmariae* in silvis Montmorency Gallia. — *Pseudohelotio deparculo* affine sed differt colore citrino, ascis octosporis, sporidiis majoribus, intus granulosis.

3. *Pseudohelotium microspermum* Speg., Myc. Arg. IV, in An. Mus. 5540 Buenos Aires (1909) p. 446. — Minutum, laxe gregarium, vix pedicellatum, tenuissime puberulum, extus cinerescens intus testaceum, orbiculare, 0,5-1 mm. diam., pilis cylindræis subcontinuis 20-40 \times 3; ascis subclavulatis, apice rotundatis, brevissime crasseque pedicellatis, 30 \times 4, octosporis, parce filiformi-paraphysatis; sporidiis recte distichis, e fusoides-navicularibus, utrinque obtusulis, 4-6 \times 1,5, biguttatis v. diblastis, hyalinis.

Hab. ad ramos emortuos decorticatos *Solani verbascifolii* in silva Santa Catalina pr. Buenos Aires Argentina.

4. *Pseudohelotium glaucum* Speg., Fungi Chilenses (1910) pag. 122, 5541 cum icon. — Ascomatibus sparsis v. laxissime turbinato-patellariibus, brevissime pedicellatis, 1-2 mm. diam., tenuibus glaucis, extus pruinulosis, pilis minimis hyalinis subunicellularibus levibus sed subnodulosis, 25-50 \times 2-3; ascis linearibus subclavulatis obtusiusculis, paraphysatis, 50 \times 5-6, octosporis; paraphysibus 55-60 \times 1-1,5; sporidiis lineari-subfusoides parvulis hyalinis, 8-10 \times 1,25-1,50.

Hab. ad pedunculos siccos putrescentes *Lobeliae Tupæ* pr. Ciudad de Valdivia Chile Amer. austr. — E grege *Eu-Pseudohelotii*.

5. *Pseudohelotium ammoides* Sacc., Ann. Mycol. VI (1908) p. 564. — 5542 Dense v. laxe gregarium, superficiale, minutum, granuliforme, albidomelleum, ceraceum; ascomatibus urceolatis demum late apertis, 350-370 μ . diam., albo-pruinosis, contextu minute celluloso, cellulis sphaeroideis, ad marginem oblongis; ascis clavatis, apice summo truncatulis, deorsum sensim crasse tenuatis, 60-80 \times 8-9, octosporis; paraphysibus bacillaribus, subæqualibus; sporidiis in parte super. asci distichis obovatis, obtusis, 8,5-9 \times 2,5-3, hyalinis, eguttulatis.

Hab. in corticibus dejectis *Carpini* in silvis Lyndonville Amer. bor. (FAIRMAN). — Affine *Pseudohel. puberulo*, sed sporidia utrinque obtusa nec attenuata etc.

MOLLISIA (Fr.) Karst. — Syll. VIII p. 321, X p. 12, XI p. 407, XIV p. 774, XVI p. 720, XVIII p. 65.

1. **Mollisia atro-flava** Rehm, Ann. Mycol. V (1907) pag. 546. Sacc., 5543

Myc. ven 731 sub *Niptera cinereæ* forma. — Ascomatibus in ligno subnigrato gregariis, sessilibus, primitus globoso-clausis, dein patellaribus, disco orbiculari plano, sæpe tenuiter albidulo-marginato, cinereo-flavidulo, excipulo parenchymatico fusco, cellulis versus marginem elongatis, atro-fuscis præditis 0,3-2,5 mm. latis, ceraceis, siccis complicatis, involutis, scabriusculis; ascis clavatis, apice rotundatis, 45-50 \times 4-5, octosporis, jodo immutatis; sporidiis oblongis, obtusis, rectis vel subcurvatis, 1-cellularibus, hyalinis, 6-8 \times 2, distichis; paraphysibus filiformibus, 2 μ . crassis, haud clavatis, hyalinis.

Hab. in ligno *Rhois* radicans putri in Italia boreali (G. BIZZOZERO).

2. **Mollisia lignicola** Phill. — Syll. VIII, p. 366 (*Pyrenopeziza*) — 5544

var. *viticola* P. Henn., Verh. Bot. Ver. Prov. Brandenb. L (1908) pag. 133. — A typo differt margine ascomatum albido et hyphis hyalinis, septatis prædito, sporidiis plerumque clavatis, disco atro-cinereo; ascis octosporis, 45-52 \times 5,5-7,5; sporidiis 7-10 \times 2,5-3.

Hab. in ramis *Vitis* viniferæ, Tamsel Germania (VOGEL). — *M. Myricariæ* (Rehm) etiam affinis sed differt disco griseo-albo. Nonnullis characteribus etiam ad gen. *Tapesiam* vergit.

3. **Mollisia pallens** (Boud.) Sacc. et Trott., *Mollisiella pallens* Boud., 5545

Icon. Mycol. tom. III, tab. 557 (1907), Hist. et Classif. Discomyc. Europe (1907) p. 142. — Minuta aut minutissima, 0,5-1 mm. lata, albido-cinerea; ascomatibus marginatis extus ad basim furfuraceo-nigrescentibus; ascis clavatis, octosporis, foramine vix marginato, 38-40 \times 7-8; paraphysibus tenuibus, granulosis 2 μ . cr.; sporidiis fusoides, rectis v. curvulis, intus ad extremitates minute granulosis, 8-9 \times 1,5-2.

Hab. ad radices putres *Pruni* spinosæ, Montmorency Gallie.

4. **Mollisia ravida** Syd., Ann. Mycol. VIII (1910) p. 40. — Ascoma- 5546

tibus hypophyllis, in maculis effusis obsoletis pallidis plus minus copiose insidentibus, sparsis vel aggregatis, sessilibus, glabris, ceraceis, 0,3-0,4 mm. diam, disco rotundo griseolo tenuissime brunneo-marginato, in sicco corrugatis, atro-griseis; ascis clavatis vel cylindraceo-clavatis, apice rotundatis, octosporis, 45-60 \times 9, subsessilibus; sporidiis monostichis vel irregulariter distichis, late ellipsoideis, utrinque rotundatis, continuis, eguttulatis, 5-9 \times 4-5, hya-

linis vel hyalino-viridulis; paraphysibus hyalinis, filiformibus, c. 1 μ . crassis.

Hab. in foliis vivis Lagerstroemiæ speciosæ, Lamao, Bataan, prov. Luzon, ins. Philipp. (E. D. MERRILL). — Species minuta, ægre observanda, affinis ut videtur, *Mollisiæ arescenti* et *M. Mikaniæ*.

5. *Mollisia allantoidea* Syd., Ann. Mycol. VI (1908) p. 483. — Asco- 5547
matibus gregariis, rarius solitariis, late sessilibus, hinc inde confluentibus, disco plano tenuiter marginato, flavo-brunneis vel demum brunneis, levibus, 0,3-0,8 mm. diam., ceraceis; ascis clavato-cylindræis, apice rotundatis, 18-25 \times 3, octosporis, breviter stipitatis; sporidiis distichis, allantoideis, plerumque leniter curvulis, hyalinis, continuis, $3\frac{1}{2}$ -5 \times 1; paraphysibus paucis, filiformibus, hyalinis.

Hab. in caulibus Tanacetii vulgaris, Tamsel pr. Cüstrin, Marchia Brandenb. (P. VOGEL). — Species minutie ascorum et sporidiorum probe distinguenda.

6. *Mollisia fagicola* Noelli, Malpighia v. XXIII (1909) pag. 182. — 5548
Ascomatibus gregariis, superficialibus, minutis, sessilibus, 1-1,5 mm. latis, planis, demum convexis, extus glabris, fuscis; ascis elongatis, claviformibus, 8-sporis, 165-180 \times 14-19; sporidiis stipitatis in parte superiore asci, elongatis, continuis, hyalinis, apice obtusis, infra acutis, 21-39 \times 2-3; paraphysibus filiformibus, gracilibus, curvulis.

Hab. in foliis Fagi silvaticæ prope Fomarco Val d'Ossola in Pedemontio It. bor.

7. *Mollisia obscurella* (Boud.) Sacc. et Trott., *Mollisiella obseurella* 5549
Boud., Icon. Mycol. t. III, tab. 556 (1907), Hist. et Classif. Discomyc. Europe (1907) p. 142. — Minuta aut minutissima 0,50-1,20 mm. lata, sessilis, applanata, marginata, dein varie undulata, cinereo-lutescens, hymenio fuliginoso, extus glabra; ascis clavatis, minutis, octosporis, ad basim attenuatis, 40-45 \times 7-8; paraphysibus rarioribus, tenuibus, intus subgranulosis, 1,5-2 μ . cr.; sporidiis minoribus, ovato-oblongis, intus non granulosis, 5-6 \times 2-3.

Hab. ad corticem putrem Quercus, Montmorency, Gallia.

8. *Mollisia spectabilis* Kirschst., Verh. Bot. Ver. Brandenb. XLVIII, 5550
(1906) p. 41. — Ascomatibus hypophyllis sparsis, obscure griseis, primum globoso-clausis dein hemisphærico-apertis, 1 mm. circ. d., disco griseo-cyaneo prominenti acute marginato præditis; excipulo valde evoluto, obscure griseo; ascis elongato-clavatis, longe pedunculatis, 80-100 \times 9-10, octosporis; sporidiis hyalinis, eguttulatis, ob-

longis v. oblongo-fusoideis, sæpe inæquilateris, $12-15 \times 4$; paraphysibus hyalinis, filiformibus, 3 μ . cr.

Hab. in foliis putrescentibus *Quercus* sp., in silvis pr. Rathenow Germaniæ. — Excipulo valido a ceteris speciebus valde distincta.

9. *Mollisia papillata* Earle, Bull. of the New York Bot. Gard. (1904) 5551 p. 290. — Ascomatibus sparsis, nigris, cupulatis, rugoso-papillatis, 0,5-1 mm. diam., sessilibus, margine conspicue elevato et sicco recurvato, disco ex obscure ardesiaco nigrescente, excipuli cellulis polygoniis, versus marginem elongatis ibique clavato-papillatis 25×5 ; ascis confertis, cylindraceis, circ. 50×4 ; paraphysibus filiformibus; sporidiis oblique monostichis vel subdistichis, hyalinis, continuis, cylindraceis, sæpe subcurvulis, $8-10 \times 2$.

Hab. in fragmentis ligneis vetustis aeri diu expositis pr. Stanford Univ. California (C. F. BAKER). — *M. melaleuca* (Fr.) Sacc. affinis sed ascomatibus cupulatis nec patellatis, extus magis distincte rugosis, disco obscuriore diversa.

10. *Mollisia Schumacheri* (Fries) Rehm, Ann. Mycol. V (1907) p. 545, 5552 *Peziza fusca* Schum. non Pers., *Peziza Schumacheri* Fries, Syst. myc. II, p. 98, *Lachnella Schumacheri* Phill. Man. Br. Disc., p. 262, Exs. n. 167, *Trichopeziza fusca* (Schum.) Sacc. — Syll. VIII, p. 414. — Ascomatibus gregariis, sessilibus, plerumque in ligni superficie denigrata, primitus globoso-clausis, diu hemisphæricis, disco plano, purpureo-fusco vel cinereo, crasse marginato, excipulo fusco, scabriusculo, versus marginem cellulis seriatis distantibus, ceterum parenchymatice contexto, 0,5-2 mm. diam.; ascis clavatis, apice rotundatis, $40-45 \times 6-8$, 8-sporis, jodo immutatis; sporidiis fusiformibus, rectis vel subcurvatis, 1-cellularibus, hyalinis, $9-12 \times 2$, distichis; paraphysibus filiformibus 2 μ . versus apicem 3 μ . cr., hyalinis, prominentibus.

Hab. ad ligna emortua in Anglia, Dania. — Pili genuini desunt, hinc *Mollisiæ* species, non *Lachnella* nec *Trichopeziza*.

11. *Mollisia Copelandi* Rehm, Ann. Mycol. V (1907) p. 545. — Asco- 5553 matibus in maculis irregulariter orbicularibus, plerumque confluentibus, 1-3 mm. lat., cinereo-niveis vel albis, ex parenchymate tenuissimo epidermidis foliorum formatis sparsis, sessilibus, primitus globoso-clausis, dein patellaribus, disco orbiculari, fuscidulo, albido-marginato, plano, 270 μ . diam., excipulo hyalino parenchymatico; ascis clavatis, sessilibus, 40×12 , octosporis, jodo immutatis; sporidiis clavatis, utrinque obtusis, sub medio septatis, haud constri-

etis, hyalinis, 12×4 , strato mucoso, tenuissimo obductis, distichis; paraphysibus conglutinatis, dilute flavidulis; hypothecio flavidulo.

Hab. in epiphylo folii Caryotæ, Zamboarya District, Mindanao, in ins. Philipp. (E. B. COPELAND). — Ob ascomata in maculis foliorum albis insidentia, species *Tapesiam* in memoriam revocat. Si vero sporidia genuine 1-septata sunt, potius *Nipteræ* species videtur.

12. *Mollisia chionea* Mass. et Crossl. — Syll. XIV, p. 775 — var. 5554
macrospora Boud., Icon. mycol. (1906) n. 192, Hist. et Classif. Discom. Europe p. 138 (1907). — A typo differt sporidiis tantum paulo majoribus.

Hab. in caulibus ? Cyperacearum in Gallia.

13. *Mollisia luctuosa* Boud., Icon. Mycol. t. III, tab. 543 (1907), Hist. 5555
 et Classif. Discomyc. Europe (1907) pag. 138. — Minuta, 0,5-1,5 mm. lata, tota cinerea, margine pallidiore; cupulis primo urceolatis dein explanatis et undulatis, subtus minutissime puberulis, concoloribus, hymenio et carne saturatioribus; ascis clavatis, octosporis, $55-60 \times 8-9$; paraphysibus cylindræis, intus oleosis aut granulosis, 3-5 μ . cr.; sporidiis elongato-fusoideis, sæpius 4-guttulatis, rectis aut curvulis, acutiusculis, $18-20 \times 3-3,5$; pilis externis brevibus, clavatis, 2-3-articulatis, fuscidulis, intus guttulosus, extus granulosus, $30-50 \times 10-15$.

Hab. inter folia putrida Caricis maximæ, Montmorency Gallia.

14. *Mollisia purpurea* Rehm, Ascom. exs. n. 1684, Annales Myc. V 5556
 (1907) p. 80. — Ascomatibus dispersis, sessilibus, primitus globuloso-clausis, dein urceolatis, demum patellaribus, disco orbiculari plano purpureo, margine fusco cincto, excipulo glabro, fusco, parenchymatice contexto, 0,5-1,5 mm. diam., siccis subcomplicatis, ceraceo-membranaceis; ascis clavatis, apice subacutatis, circ. 70×9 , octosporis, jodo cærulescentibus; sporidiis fusoideis, rectis v. curvulis, 1-cellularibus, plerumque cum guttulis 2 oleosis, hyalinis, $12-14 \times 2,5-3$, distichis; paraphysibus filiformibus 2 μ ., versus apicem 3-4 μ . cr., guttulis oleosis ochraceis repletis; hymenio dilute olivaceo.

Hab. in medio fasciculi foliorum putridorum Graminis in faucibus « Höllenthal » sub M. Zugspitz alpium Baviaræ (REHM). — A *M. citrinuloide* Rehm disci colore diversa, a *M. puccinioides* (De N.) Sacc. sporidiis diversis, a *Moll. caricinella* Br. disci colore etiam diversa.

15. *Mollisia citrinuloides* Rehm, Ann. Myc. III (1905) p. 226. — Asco- 5557

matibus dispersis, late sessilibus, primitus globoso-clausis, dein disco orbiculari, tenuiter marginato, plano, late aperto, hyalino-flavidulis, demum dilute citrinulis; excipulo parenchymatico, glabro, versus basim fuscidulo, 0,5-1,5 mm. diam., siccis haud corrugatis, senilibus nigrescentibus ceraceis; ascis cylindraceo-clavatis, apice subacutatis, 50-55 \times 6, jodo tinctis, octosporis; sporidiis elongato-fusoideis, basi acutatis, rectis curvulisve, continuis, hyalinis 10-12 \times 1,5-2, distichis; paraphysibus filiformibus hyalinis, 2 μ . cr.

Hab. ad culmos putrescentes *Molinia* caruleæ, Sonntagberg Austriæ inf. (P. STRASSER). — Habitu *Pezizellæ citrinulæ* æmula sed ascomatibus parenchymaticis, lata basi sessilibus mox dignoscitur.

16. *Mollisia benesuada* (Tul.) Phill. — Syll. VIII, p. 333. — fm. 5558
Hippophaës Rehm, Ann. Myc. III (1905) p. 393 (nomen nudum).

Hab. in ramis putrescentibus *Hippophaës rhamnoidis*, prope Warnemünde Mecklenburg Germaniæ.

17. *Mollisia Haglundi* Rehm, (Esterr. bot. Ztschr. LVI (1906) p. 344. 5559
— (Nomen nudum).

Hab. in fragmentis pineis Tunnelschutt prope St. Anton Arlberg Austria.

18. *Mollisia Sterei* Rehm, ap. Strasser in Verh. k. k. zool.-bot. Ge- 5560
sell. Wien LVII (1907) p. 325. — (Nomen nudum).

Hab. ad Corticium jonides in ramis fagineis siccis Sonntagberg Austriæ inf.

19. *Mollisia culmina* Sacc. — Syll. VIII, p. 336 (*M. cinerea* v. *cul-* 5561
mina) — var. *alpina* Rehm, (Esterr. bot. Zeitschr. LVI (1906)
p. 344. — (Nomen nudum).

Hab. ad gramina et in Junco Hostii, Austria.

MOLLISIOPSIS Rehm, Ann. Mycol. VI (1908) p. 315 (Etym. *Mollisia* et *opsis* aspectus). — A genere *Mollisia* paraphysibus lanceolato-acutatis, longe prominentibus diversa.

1. *Mollisiopsis subcinerea* Rehm, l. c. p. 315. — Ascomatibus gre- 5562
gariis, sessilibus, primitus globoso-clausis, dein orbiculariter explanatis, disco hyalino, tenuiter marginato, 0,3-1 mm. diam., extus glabris, excipulo parenchymatico, versus basim subfusco, siccis subinvolutis, disco flavidulo, plerumque albido-marginato; ascis clavatis, apice rotundatis, 45-50 \times 6-7, octosporis, jodo tinctis; sporidiis subclavatis, rectis, 1-cellularibus, hyalinis, 8-9 \times 2, distichis;

paraphysibus lanceolato-acuminatis, medio 4-5 μ . cr., longe prominentibus.

Hab. ad caules siccos *Thalictri*, Lyndonville Amer. bor. (Dr. FAIRMAN). — Modo paraphysibus lanceolato-acutatis a *M. cinerea* et congeneribus discernenda species.

CHLOROSPLENium Karst. — Syll. VIII p. 315, X p. 12, XI p. 407, XIV p. 773. XVIII p. 65.

1. *Chlorosplenium lividum* (A. S.) Karst. — Syll. VIII, p. 319 — 5563
Huc ducendum est *Cenangium strobilinum* Sacc., Fungi ital. f. 1306, seu *Ombrophila strobilina* (A. S.) Rehm, Disc. p. 482.

Hab. in strobiliis *Abietis* etiam prope Romam (BAGNIS).

PEZICULA Tul. — Syll. VIII p. 73 et 489, X p. 11, XIV p. 773, XVI p. 730.

1. *Pezicula platensis* Speg., Myc. Arg. IV in An. Mus. Buenos Aires 5564 (1909) pag. 447, fig. 37. — Sparsa, minuta, sessilis, lenticularis, fusco-lateritia, 1-1,5 mm. diam., subtus turbinata, disco convexula, testacea, ceraceo-rigidula; ascis majusculis tenuissime tunicatis subsaccatis, densissime tenuiterque paraphysatis, octosporis, apice rotundatis, 140-150 \times 30, deorsum subcuneatis breviterque et crasse pedicellatis, jodo immutatis; sporidiis ellipsoideis, dense minuteque guttulatis, distichis, utrinque obtusis, 20 \times 12-14, plus minus inæquilateris, levibus, hyalinis.

Hab. ad rhizomata *Polypodii squamulosi* super caudices vetustos, La Plata, Argentina.

2. *Pezicula majuscula* Spegazz., Myc. Arg. IV, in An. Mus. Buenos Aires 5565 (1909) pag. 447. — Turbinata, extus ochroleuca, disco concava, livida, insititia, dein cupulato-expansa, breviter crasseque pedicellata, margine integerrima, 5-15 mm. diam., 5-7 mm. alt.; ascis linearibus, filiformi-paraphysatis, apice obtuse rotundatis, deorsum subangustatis longeque pedicellatis, 250 \times 14, parte sporif. 160 μ . long., octosporis, jodo immutatis; sporidiis ellipsoideis, utrinque obtusulis, recte monostichis, 22-24 \times 12, leniter inæquilateris, 2-guttatis, hyalinis.

Hab. ad ramos dejectos putres, Parque Roca pr. Tucumán Argentina.

PYRENOPEZIZA Fuck. — Syll. VIII p. 354, X p. 17, XI p. 409, XVI p. 732, XVIII p. 71.

1. *Pyrenopeziza millegrana* Boud., Icon. Mycol. t. III, tab. 552 (1907), 5566 Hist. et Classif. Discomyc. Europe (1907) p. 133. — Minutissima, 0,30-0,60 mm. lata, cinereo-albida, extus fuliginosa; ascomatibus urceolatis margine albido-cinctis, extus fuliginoso-squamulosis, hymenio pallide cinereo; ascis cylindrico-fusiformibus, ad basim vix attenuatis, octosporis, foramine immarginato, 60-70 \approx 10-11; paraphysibus tenuibus, ad apicem non incrassatis, pallidis, 3-3,5 μ . cr.; sporidiis fusoidis, intus multi-guttulosis, 22-28 \approx 4-5, rectis v. leviter curvatis.

Hab. gregaria ad caules putres *Spirææ* *Ulmariæ* in silva Montmorency, Gallia. — A *Pyr. pulveracea* et *Ulmariæ* sporidiis majoribus et multiguttulatis bene distincta.

2. *Pyrenopeziza distinguenda* Starb. — Syll. XVI, p. 733 — var. ni- 5567 *grofoliacea* Rehm, Ascom. exs. n. 1633, Ann. Mycol. V (1907) p. 79. — A typo differt mycelio ad folia obscuriore, ascis octosporis, paraphysibus apice crassioribus, 2-3 μ .

Hab. ad folia putrescentia *Cirsii*, Sonntagsberg Austriæ inf. (STRASSER).

3. *Pyrenopeziza araucana* Speg., Fungi Chilenses (1910) p. 123. — 5568 Ascomatibus laxè gregariis patellaribus sessilibus, margine involutis, crassiusculis, extus atris glabris, intus pallide carneis, 150-500 μ . diam.; ascis clavulatis modice tenuiterque pedicellatis, 50 \approx 4, paraphysibus filiformibus apice non incrassatis, obtusis obvallatis; sporidiis pusillis cylindræis non v. vix botuliformibus hyalinis, 5-6 \approx 1,50-1,75.

Hab. ad ramos emortuos putrescentes *Perseæ* Lingue pr. Ciudad de Valdivia Chile Amer. austr.

4. *Pyrenopeziza Galii* Fuck. Symb. mycol. (1869) pag. 295 — Syll. 5569 VIII, pag. 356 — forma *Lycopi* Kunze F. sel. n. 289 (1877) ut var. *Pyr. Gentianæ*, *Pyrenopeziza Lycopi* Rehm, Disc. p. 626 et 605 (icon) (1892). — Ascomatibus 0,5-1,5 mm. long., 1 mm. lat. brunneis, disco griseo, demum hysterioidis; ascis 50-70 \approx 7-9; sporidiis 8-10 \approx 3,5-4.

Hab. in caulibus emortuis *Lycopi* europæi, Eisleben Germaniæ (KUNZE).

5. *Pyrenopeziza ligni* (Desm.) Sacc. — Syll. VIII, pag. 366 — var. 5570 *Hippophaës* Rehm, Ann. Myc. v. III (1905) p. 393 (*Cenangium*) [Nomen nudum].

Hab. in ramis emortuis *Hippophaës rhamnoidis*, prope Warnemünde Mecklenburg Germaniæ.

6. **Pyrenopeziza placentiformis** (Niessl) Rehm, Discom. p. 613, *Peziza* 5571
placentiformis Niessl, Verhandl. zool. bot. Gesellsch. Wien (1858) p. 331, t. 8, f. 3. — Ascomatibus gregariis, primo innatis, urceolatis, clausis, dein erumpentibus et cupuliformibus, basi lata sessilibus, disco concavo rubenti-flavido v. brunneolo, inflexo-marginato præditis, extus brunneis et rugulosis, 0,5-1 mm. diam., ceraceis; ascis clavatis, apice rotundatis, 6-8-sporis; sporidiis ellipsoideis, 1-cellularibus, hyalinis; paraphysibus filiformibus sursum clavulatis.

Hab. in ramulis emortuis *Sambuci nigrae*, Wiltau Tiroliae (v. NISSL). — Videtur *P. Ebuli* affinis.

7. **Pyrenopeziza patagonica** Speg., Myc. Arg. IV, in An. Mus. Buenos Aires (1909) p. 448. — Minuta, sessilis, disco concaviusculo, fusco-atra, orbicularis, 0,5-1 mm. diam., subtus convexula, fusco-olivacea, margine acuto minutissime denseque fimbriatulo; pilis acutis hyalino-fulvellis, 40 \times 2,5 ornato; ascis linearibus apice obtuse rotundatis, deorsum leniter tenuatis modice crasseque pedicellatis, 60 \times 6-7, octosporis, paraphysibus filiformibus apice sæpe denticulatis; sporidiis suballantoideis utrinque obtusulis, minutis, hyalinis, oblique monostichis non v. minute 2-guttulatis, 9-10 \times 3.

Hab. ad ramulos aridos adhuc pendulos *Duvauæ* dependentis prope Rio Deseado, Patagonia, Argentina.

8. **Pyrenopeziza ? chilensis** Speg., Fungi Chilenses (1910) p. 123. — 5573
 Ascomatibus laxè gregariis atris coriacellis sessilibus, udis patellari-applanatis, siccis vix corrugato-contractulis, glabris vel obsoletissime pruinuloso-pilosulis, 0,5-2 mm. diam.; ascis subcylindræis modice pedicellatis, paraphysibus subfiliformibus, sursum lenissime incrassatulis apiceque acutis obvallatis, 50-60 \times 6, octosporis; sporidiis mono- v. distichis ellipsoideo-subcylindræis, pusillis, hyalinis, grosse biguttulatis, 6 \times 2,5.

Hab. in ramis emortuis dejectis (*Nothofagi?*), Cerro Caracol de Concepcion, Chile Amer. austr.

9. **Pyrenopeziza Salicis-capreae** Jaap in Abhandl. Bot. Ver. Prov. Brandenb. LII (1910) p. 123. — 5574
 Peritheciis arcte gregariis, amphigenis, primum globosis, dein late depressis, intus pallidis extus obscure brunneis, subrugulosis, siccis fere nigris, 0,2-0,3 mm. latis, contextu parenchymatico nigro ad marginem pallidiore; ascis late clavatis, supra angustatis obtusulis incrassatis, 75-100 \times 16-20, o-

ctosporis; sporidiis irregulariter distichis, ellipsoideis v. elongato-ovoideis, subinæquilateralis, supra rotundatis, basi breviter acutatis, hyalinis, $13-22 \approx 6-8,5$, unilocularibus, quandoque biguttulatis; paraphysibus filiformibus, ramosis, hyalinis, septatis $2-4 \mu$. cr. supra usque ad 6μ . claviformi-incrassatis. J +.

Hab. in foliis vetustis Salicis capreae prope Triglitz in Germania. — Status conidicus adest: *Marsonia salicicola* Bres.

10. *Pyrenopeziza Ellisii* (Rehm) Masee, Journ. of Bot. XXXIV 5575 (1896) pag. 149, t. 357, fig. 6-7, *Peziza denigrata* Ellis N. Am. Fungi n. 565, non J. Kunze, *Niptera Ellisii* Rehm in litt. 1885 ad Ellis — Syll. XI (1895) p. 416 (nomen). — Sparsa v. gregaria, erumpens, primo subglobosa et clausa, dein expansa, tenuis, molliuscula, nigro-grisea, glabra, $0,5-0,7$ mm. diam., excipuli cellulis exterioribus irregulariter polygoniis, $9-12 \mu$. diam., sursum subparallele elongatis et marginem minute fimbriatum reddentibus, atro-brunneis; strato submarginali ex hyphis hyalinis longis conflato et marginulum album formantibus; ascis clavatis apice tenuatis jodoque tinctis, deorsum in pedicellum longum sæpe curvulum tenuatis, $90-100 \approx 10-12$, octosporis; sporidiis biseriatis, cylindræis, utrinque obtusis, continuis, levibus, sæpe curvulis, 2-guttulatis, $14-16 \approx 3,5-4$; paraphysibus paucis, cylindricis, septatis, 3μ . cr.

Hab. in culmis emortuis Festucae tenellae, Newfield, N. J. et Ammophilae longifoliae, Montana Amer. bor.

TAPESIA (Pers.) Fuck. — Syll. VIII p. 371, X p. 18, XI p. 410, XIV p. 775, XVI p. 734, XVIII p. 72.

1. *Tapesia epicladoricha* Sacc., Ann. Mycolog. VI (1908) pag. 565, 5576 tab. XXIV, fig. 5. — Subiculo *Cladotrichi Tapesiae*: hyphis sterilibus repentibus iterato-ramosis, septatis, fuligineis, intertextis, fertilibus ascendentibus $150-200 \approx 4-5$, aequè fuligineis, septatis, sursum sæpe leviter crassioribus et obsolete denticulato-sporigeris; conidiis oblongis, 1-septato-constrictis, $8,5 \approx 4-4,5$ fuligineis; ascomatibus subiculo cinctis, plano-scutellatis, pallide cinereis, extus nigris, glabris, $1-3$ mm. diam., contextu dense parenchymatico atrofuligineo; ascis tereti-clavatis, breve stipitatis, apice obtusulis, $50 \approx 6-7$, octosporis; paraphysibus paucis, filiformibus, ascum non superantibus; sporidiis anguste fusoides, utrinque acutiusculis, rectis, oblique monostichis, $7-10 \approx 1,5-2$, hyalinis, biguttulatis.

Hab. in lignis putrescentibus (Liriodendri?), Lyndonville

Junio 1908 (FAIRMAN). — *Cladotrichi* subiculum cum *Tapesia* videtur vere connexum.

2. *Tapesia secamenti* Fairm., Ann. Mycol. VIII (1910) p. 329. — Su- 5577
biculo primo radiatim gossypino, dein effuso et dense implicato, ex hyphis simplicibus v. subramosis, continuis, glabris, hyalinis, 3 μ . latis composito; cupulis primitus subglobosis, dein expansis, fuligineo-atris v. fusco-olivaceis, sessilibus; ascis fusosideis-cylindraceis, 57 \approx 6-7; paraphysibus indistinctis; sporidiis monostichis, hyalinis, continuis, ellipsoideis v. fusosideis, 7-10 \approx 2-3.

Hab. in assulis vetustis dejectis Betulæ in silvis prope Lyndonville N. Y. Amer. bor. — *Tap. byssinæ* affinis.

HYPHODISCUS Kirschst., Verh. Bot. Ver. Brandenb. XLVIII, p. 44 (Etym. *hypha* et *discus* ob ascoma *subiculo* insidens). — Ascomata in subiculo effuso insidentia, ceracea, primum globosa, clausa, demum applanato-discoidea, excipulo brunneo ex cellulis globosis sursum marginem versus filiformibus formato. Asci cylindracei v. clavati, octospori. Sporidia globosa. — Ab analogis gen. *Tapesia* et *Trichobelonio* sporidiis globosis præcipue differt.

1. *Hyphodiscus gregarius* Kirschst., l. c. p. 44, cum icon. — Asco- 5578
matibus gregariis in subiculo effuso primum albo-griseo demum olivaceo insidentibus, disco griseo-flavido, minute pruinoso marginato, 250-500 μ . diam.; excipulo bene evoluto, flavo-brunneo; ascis cylindraceo-clavatis, supra rotundatis, 35-45 \approx 4-5, octosporis; sporidiis mono- v. distichis, globosis, levibus, hyalinis, 2 μ . diam.; paraphysibus filiformibus, continuis, 2 μ . cr.

Hab. in ligno putri Rhamni Frangulæ, in silvis pr. Rathenow Germaniæ.

DESMAZIERELLA Lib. — Syll. VIII p. 386.

1. *Desmazierella foliicola* Rick, Broteria V (1906) p. 33. — Ascoma- 5579
tibus applanatis, sessilibus, tenuibus, subhyalinis, ceraceis, extus ad marginem pilis rigidis, raris, 1 mm. longis obsitis, crinibus brunneis, septatis, obtuse apiculatis; ascis 160 μ . long., 10 μ . latis; sporidiis hyalinis, ellipsoideis, uniserialibus, unilocularibus, 12-17 μ . long., 10 μ . latis, membrana granulata; paraphysibus filiformibus, hyalinis, 4 μ . crassis, versus apicem parum incrassatis, discum superantibus.

Hab. in foliis deciduis, Rio Grande do Sul Brasilæ.

Syll. fung. XXII (I-1913)

2. *Desmazierella bulgarioides* Rick, in Ann. Mycol. III (1905) p. 238. 5580

Ascomatibus sessilibus, superficialibus, usque ad 1 cm. latis, valde undulatis, tenacibus, gelatinosis, fuligineo-atris, pilis rigidis brunneis, multiseptatis, nodulosis, apice subrotundatis, $200-300 \approx 10$ conspersis, disco marginato, primitus clauso et dilute vinoso, dein aperto et fuligineo-atro, verrucis et setulis rigidis brunneis, multiseptatis, nodulosis, apice subrotundatis $200 \approx 10$ undique obsito; ascis linearibus vel cylindricis, circ. $120 \approx 8-10$, arcte conglutinatis et unitis cum paraphysibus in massam gelatinosam diffusis; sporidiis clavatis vel cylindricis vel etiam subfusiformibus, $12-17 \approx 3-4$, unicellularibus, denique spurie septatis, subflavidulis, membrana levi, subinaequilateralibus (immaturis guttulatis et multo majoribus); paraphysibus filiformibus, flaccidis, versus pedem in stratum gelatinosum diffluentibus, versus apicem incrassatis, subviridulis, epithecium non formantibus.

Hab. in trunco putrido, Theewald in Brasilia. — A typo generis satis desciscit.

ERIOPEZIA Sacc. — Syll. VIII p. 381, XVIII p. 73.1. *Eriopezia albo-lateritia* Rehm in Jaap, Verh. bot. Ver. Prov. 5581 Brandenb. LII (1910) p. 114. — (Nomen nudum).

Hab. in ligno quercino putri prope Triglitz in Brandenburgia. — Cum *Tapesia cruenta* P. Henn. comparanda dicitur.

PIROTTÆA Sacc. — Syll. VIII p. 386, X p. 19, XIV p. 776, XVIII p. 73.1. *Pirottæa Pini* v. Höhnelt, Fragm. z. Myk., Sitzb. k. Ak. d. Wiss. 5582

Wien, Bd. CXVI, Abt. I (1907) p. 135. — Ascomatibus in parvos greges dispositis, $180-200 \mu$. latis, supra depressis, disco albedo, infra in pedicellum $60 \approx 40$ conoideo-angustatis, superficialibus, extus brunneis; excipulo tenui setulis rigidis numerosis, nigris, acutis, unilocularibus, usque ad $120 \approx 3-5$ tecto; margine ascomatum ciliolato, ciliis 1-2-stratosi, cylindraceis, supra rotundatis, brunneis $40 \approx 4-5$; paraphysibus sparsis, tenui-filiformibus, hyalinis; ascis clavatis, basi breviter angustato-pedicellatis, $32 \approx 6$, octosporis; sporidiis unilocularibus, tenuiter tunicatis, hyalinis, fusoides, utrinque plerumque acutatis, $10-18 \approx 1,6-2$. J +.

Hab. in cortice putrescenti Pini silvestris, Steinberg Wierwald Austriæ inf. — *Pir. mimatensi* P. et R. et *P. venturioidi* S. et R. affinis sed distincta.

2. **Pirottæa Bongardii** (Weinm.) Rehm, ap. Jaap in Abh. Bot. Ver. 5583
Prov. Brandenb. IL (1907) pag. 12. — Ita vocanda *Pyrenopeziza*
Bongardi (Weinm.) Sacc. — Syll. VIII, p. 358.

LACHNELLULA Karst. — Syll. VIII p. 390, XI p. 411, XVIII
p. 76.

1. **Lachnellula calva** Rick, Broteria V (1906) p. 34. — Ascomatibus 5584
gregariis, 1-2 mm. latis, fere sessilibus, pruinosis, subvillosis, pri-
mitus calyciformibus, fulvo-ferrugineis, disco lobato-undulato, mar-
gine determinato, albo-sericeo; ascis subcylindræis, breviter pe-
dicellatis, 40-50 \times 5-7, octosporis; sporidiis sphæroideis, unicellula-
ribus, hyalinis 2,5-3 μ . cr., guttulatis, membrana incrassata; pa-
raphysibus linearibus obvallantibus, sæpe furcatis.

Hab. in ligno arborum frondosarum putrido, Rio Grande do
Sul Brasiliæ. — Primo intuitu videtur *Dasyscypha* ob naturam
indumenti pilorum, sed sporidiis sphæroideis evidenter demonstra-
tur *Lachnellula*.

LACHNELLA Fr. — Syll. VIII p. 391, X p. 19, XI p. 411, XIV
p. 777, XVI p. 334, XVIII p. 76.

1. **Lachnella Bresadolæ** Strasser, Verh. zool. bot. Gesellsch. Wien 5585
LVII (1907) p. 334. — Ascomatibus gregariis v. sparsis, sessili-
bus, primum globoso-clausis dein rotundato-apertis et discum pal-
lide flavidum suburceolatum demumque parum depressum osten-
dentibus; excipulo rubro-brunneo, pilis incoloribus asperulis 160-
200 \times 3-4, obtusis, basi septatis, brunneolis, supra incoloribus dense
tecto; ascomatibus udis albo-griseis, siccis olivaceo-griseis et mar-
gine convolutis; ascis breviter pedicellatis, cylindræis, supra de-
presse rotundatis, basi parum clavato-angustatis, 60-80(100) \times 8-
10; sporidiis distichis, cylindræis, hyalinis. plerumque biloculari-
bus, nonnullis vero septo fere indistincto, rectis v. curvulis, raro
biguttulatis, 12-16 \times 3-3,5; paraphysibus filiformibus, hyalinis, 2-3
 μ . cr.

Hab. in fragmentis ligneis siccis Piri Mali, Sonntagberg Au-
striæ inf. — *Lach. flammeæ* (Alb. et Schw.) affinis.

2. **Lachnella Philadelphi** Rehm, Ann. Mycol. VII (1909) pag. 525, 5586
Ascom. Exsicc. fasc. 45, n. 1855. — Ascomatibus gregariis, sessili-
bus, primitus globoso-clausis, mox urceolatis, dein patellaribus, or-
bicularibus, 1-3 mm. diam., disco albido, excipulo crasso, paren-
chymatice contexto, intus hyalino, extus subfusco, pilis simplici-

bus, rectis, versus apicem plerumque acutatis, septatis, crasse asperulis, interioribus fere hyalinis, externis rubeolo-fusculis, versus apicem hyalinis, $300 \times 5-7$ oblecto; ascis elongatis, apice rotundatis v. subacutatis, $75-80 \times 8-10$, 4-8-sporis, jodo tinetis; sporidiis clavatis, medio septatis, hyalinis, $10 \times 2-2,5$, distichis; paraphysibus sparsis, rarissime subacutatis et prominentibus, hyalinis, 2-3 μ . cr.; hypothecio crystallis oxalato-calcicis prædito.

Hab. ad ramos Philadelphi coronariis, Park Kleinziegenfeld prope Weismain Franconiæ sup. (ADE).

3. *Lachnella andina* Speg., Myc. Arg. IV, in An. Mus. Buenos Aires 5587 (1909) p. 449. — Parva, gregaria, subsessilis, extus dense fibrillosa, ferruginea, patellari-applanata, sicca subglobosa, 0,3-1 mm. diam., disco concaviusculo levissimo; ascis subclavulatis, apice rotundatis, sensim longeque pedicellatis, $75-95 \times 8-9$, crasse paraphysatis, jodo fere immutatis; sporidiis inordinate dispositis, botuliformibus, utrinque obtusiusculis, $10 \times 2-2,5$, sæpius valde incurvatis, hyalinis, eguttulatis.

Hab. ad ramulos aridos et decorticatos Patagonii pinifolii, Puente del Inca pr. Mendoza, Argentina. — *Lachnellæ barbatae* peraffinis sed certe distincta.

LACHNUM Retz — Syll. XVIII p. 77 (Etym. *lachne* villus) *Dasy-scypha* et *Trichopeziza* Auct. ex p. et Syll. ex p. — Ab his generibus imprimis paraphysibus fusoides, apice acutis, plerumque ascos superantibus dignoscendum. -- Et certe horum generum plurimæ species huc transferendæ sunt.

1. *Lachnum Astragali* v. Höhn., Ann. Naturhist. Hofmus. Wien XX, 5588 Heft 4 (1905) p. 4. — Ascomatibus plerumque 1-1,5 mm. lat., breviter et tenuiter pedicellatis, siccis globosis, albis et albo-pulveraceo-pilosis, pallide aurantiacis, hemisphæricis, margine incurvatis, extus pilis crassis usque ad 200×4 tectis; ascis clavatis, sessilibus, plerumque $60-90 \times 8$, octosporis; paraphysibus numerosis 4 μ . c. crassis, acute lanceolatis, flavo-aurantiaco-guttulatis, ascos long. superantibus; sporidiis mono- v. distichis, hyalinis, unilocularibus, rectis v. curvulis, utrinque attenuatis et obtusis, $10-15 \times 3-4$; Jodi ope poro asc. fortiter cyaneo-colorato.

Hab. in caulibus Astragali sp., Erdschias-Dagh, 2300-2900 m. alt. in Asia minore.

2. *Lachnum contractum* Karst., Acta Soc. pro Faun. et Fl. fenn. 5589 XXVII, 4 (1905) p. 6. — Ascomatibus sparsis, sessilibus, plani-

sculis v. concaviusculis, siccitate varie contractis, striguloso-villosis, fuscis, 1-1,5 mm. lat, pilis hyalino-flavescentibus (sub lente), strictis, asperis, haud v. obsolete articulatis, usque ad $100 \times 2-4$; ascis cylindraneo-clavatis; sporidiis distichis, fusoido-filiformibus v. fusoido-elongatis, rectis, $8-12 \times 1$; paraphysibus acutatis.

Hab. in caulibus aridis Spirææ prope lacum Baical Sibiriae or. (O. LÖNNBOHM).

3. *Lachnum setigerum* (Phill.) Rehm, Ascom. Amer. bor., Ann. Myc. 5590 v. III (1905) pag. 518. Ita vocanda *Trichopeziza setigera* (Phill.) Sacc. — Syll. VIII, pag. 407. — Ascomate brevissime stipitato, pilis rectis, ad apicem acutis, multoties septatis, flavo-fuscis, c. $300 \times 4-5$, interdum fasciculatim conglutinatis obsesso; ascis cylindraneo-clavatis, apice rotundatis, $90-100 \times 7-8$, octosporis, poro jodo tincto; sporidiis fusiformibus, 1-cellularibus, hyalinis, $15-20 \times 3$, distichis; paraphysibus filiformibus, hyalinis, 2 μ ., versus apicem lanceolato-acutatis, 4 μ . cr., supra ascos prominentibus.

Hab. in caulibus Araliæ, Veratri etc. in America bor.

4. *Lachnum nidulus* Schm. et Kunze — Syll. VIII, p. 408 (*Trichopeziza*) — var. *Eupatorii* Bres. in Strasser, III Nachtr. Pilzfl. Sonntabg. (Verhandl. zool. bot. Gesell. Wien 1905) p. 612). — Ascomatibus confertis; pilis brunneis septatis superne incrassatis, $80 \times 8-10$; ascis $40-48 \times 4-6$; sporidiis $8-12 \times 1-1,5$.

Hab. in Eupatorio cannabino, Sonntagberg Austria inf. — Var. *Ulmariæ* Jaap, Verh. bot. Ver. Prov. Brandenburg, LII (1910) p. 116. (Nomen nudum). — Ad basim caulium vetustorum Spirææ Ulmariæ prope Triglitz Germania.

5. *Lachnum niveum* (Hedw.) Karst. — Syll. VIII, p. 437 (*Dasyscypha*) — var. *Fairmani* Rehm, Ann. Mycol. VI (1908) p. 316. — Ascomatibus gregariis, sessilibus, elongato-cyathoides, dein distincte tenuiter stipitatis, niveo-albis, primitus clausis, dein disco urceolato, hyalino vel roseolo, $0,3-1$ mm. latis, usque ad 1 mm. altis, pilis rectis, simplicibus, septatis, hyalinis, scabris, $50-60 \times 3-4$, versus apicem usque ad 8 μ . latis obtectis; ascis clavatis, $40-45 \times 6-7$, octosporis, jodo tinctis; sporidiis fusiformibus, 1-cellularibus, rectis, hyalinis, 9×2 , distichis; paraphysibus filiformibus, 2-3 μ . cr., subobtusis, prominentibus.

Hab. ad caules emortuos Solidaginis, Lyndonville N. Y., Amer. bor. (E. FAIRMAN). — A typo imprimis indumento breviori dignoscendum.

6. *Lachnum hyalinellum* Rehm — Syll. XI, p. 413 (*Dasyscypha*) — 5593

var. *fructicola* Rehm in Sydow, Ann. Mycol. V (1907) p. 398; Mycoth. germ. n. 611. — Matrice tantum a typo recedere videtur.

Hab. in pericarpis siccis Fagi silvatici, Tamsel Germania.

7. *Lachnum clavicomatum* Kirschst., Verh. Bot. Ver. Brandenburg. 5594 XLVIII (1906) p. 46. — Ascomatibus gregariis, sessilibus, $\frac{1}{2}$ - $\frac{3}{4}$ mm. diam., pilis brunneis 120-150 \approx 5, supra flavidis et usque ad 9 μ . subclavato-incrassatis, pluries septatis, rectis obsitis; excipulo brunneo; disco albo-lacteo; ascis cylindraceo-clavatis in pedicellum tenuatis, 50-56 \approx 5-6, supra rotundatis, octosporis; sporidiis distichis, subparallelis, hyalinis, cylindraceis v. fusoides, 8-14 \approx 1,5-2; paraphysibus lanceolatis, basi 5 μ . cr.

Hab. in ramulis salicinis putrescentibus prope Rathenow Germaniæ.

8. *Lachnum coarctatum* Karst., Acta Soc. pro Faun. et Fl. fenn. 5595 XXVII, 4 (1905) p. 6. — Ascomatibus gregariis, sessilibus, globosis, margine valde contractis, minute apertis, brunneis v. atrofusis, villosulis, circiter 0,8 mm. diam.; pilis flexuosis, vix articulatis, dilute fuliginis (sub microsc.), circ. 2 μ . cr.; ascis cylindraceo-clavatis 70-80 \approx 4-5; sporidiis distichis, fusoides-elongatis, rectis, 5-8 \approx 1-1,5; paraphysibus parvis, filiformibus.

Hab. in caulibus Urticæ dioicæ prope Kuopio Fennia (O. LÖNNBOHM).

9. *Lachnum calyculiforme* (Schum.) Karst. — Syll. VIII, pag. 454 5596 (*Dasyscypha*) — var. *cyphelliforme* Rehm, Verh. k. k. zool. bot. Gesellsch. Wien LVII (1907) p. 338. — Disco udo albido-flavo, paraphysibus distincte lanceolatis; ascis 48-60 \approx 6-7; sporidiis unilocularibus, obtuse fusoides, 8-10 \approx 2-3.

Hab. ad corticem Laricis dejectum, Sonntagberg Austriæ inf.

10. *Lachnum olivaceo-sulphureum* Rick, Broteria v. V (1906) p. 34. — 5597 Ascomatibus gregariis, 1-2 mm. latis, breviter stipitatis, extus pilosis, pilis usque ad 100 μ . longis, 5 μ . latis, obtusis, olivaceo-sulphureis, crystalliferis, disco isabellino v. livide melleo; ascis 50 \approx 6, octosporis; sporidiis ellipsoideis v. ovalibus, 5-7 \approx 3-4, uno apice compressis, uniserialibus, unicellularibus, hyalinis, eguttulatis; paraphysibus linearibus, versus apicem hyalinis, lanceolatis, 3-4 μ . latis.

Hab. in ligno duro arboris frondosæ, Rio Grande do Sul Brasilæ.

11. *Lachnum fusco-floccosum* Rehm, Ann. Mycol. V (1907) p. 520. 5598 — Ascomatibus gregariis, sessilibus, primitus globoso-clausis, dein

urceolatis, disco subcarneo, excipulo fuscidulo in stipitem brevissimum cylindraceum subglabrum elongato, 0,3 mm. diam., pilis multoties curvatis in infera parte, versus apicem rectis, obtusis, glabris, fuscidulis, creberrimis, ca. $500 \approx 4$ obfecto, ad marginem pilis modo ca. 90 μ . longis; ascis cylindraceis, $50 \approx 4$, octosporis; jodo tinctis; sporidiis fusoido-oblongis, interdum curvatis, hyalinis, demum medio septatis, $8-9 \approx 1,5$, distichis; paraphysibus lanceolatis, sursum acutatis, longe prominentibus.

Hab. ad ramos, Sumner Washington Amer. bor. (HARPER). —
— *L. calyculiformi* subaffine.

12. *Lachnum distinguendum* Rick, Broteria V (1906) p. 33. — Asco- 5599
matibus 2 mm. latis, disco hyalino, marginato, niveis, crinitis; setulis apice angustatis, crystalliferis, ramosis; stipite 1 mm. alto, albo, pruinato; ascis $50-60 \approx 7-10$; sporidiis fusoidis, hyalinis, unilocularibus, $10-15 \approx 3-4$, aliis etiam multo minoribus; paraphysibus sursum lanceolatis, latitudine ascorum, plerumque eguttulatis.

Hab. ad ligna putrida, Rio Grande do Sul Brasiliæ. — Macroscopice valde similis species *Dasyscyphæ distinguendæ*. Sporidiorum differentia speciem hanc cognitu facilem reddit.

13. *Lachnum controversum* (Cooke) Rehm — Syll. VIII, pag. 447 5600
(*Dasyscypha*) — fm. *caricicola* Jaap, Abh. Bot. Ver. Prov. Brandenburg. IL (1907) p. 9. — A typo differt matricæ et omnibus partibus magnitudine minore.

Hab. in foliis vetustis Caricis acutiformis, prope Triglitz Brandenburgia.

14. *Lachnum tenue* Kirschst., Verh. Bot. Ver. Brandenburg. XLVIII 5601
(1906) p. 45. — Ascomatibus sparsis, longe et tenue pedunculatis, minutis, albis, primum globosis, dein poculiformibus et discum flavidulum ostendentibus, extus pruinosis et pilis levibus supra obtusis asperulis tectis; ascis cylindraceis, sessilibus, supra rotundatis, $27-30 \approx 3$, octosporis; sporidiis distichis v. raro oblique monostichis, fusoidis, utrinque rotundatis, $8-12 \approx 0,5-1$, hyalinis; paraphysibus lanceolatis, acutatis, ascos dimidio superantibus, usque ad 3 μ . cr.

Hab. in foliis emortuis Caricis hirtæ, in silvis prope Rathenow Germaniæ. — Sporidiis angustis a ceteris speciebus distinctum.

15. *Lachnum bambusicola* Rick, Broteria V (1906) p. 33. — Asco- 5602
matibus gregariis, breviter stipitatis, ceraceis, 1 mm. latis, extus albo-villosis, disco, in sicco, subflavescenti; ascis circ. $65 \approx 10$, apice

subcompressis, octosporis, vix pedicellatis; sporidiis fusiformibus, utrinque acutissimis, $30 \approx 2-3$, guttulatis, multiserialibus, hyalinis, unilocularibus; paraphysibus 3-4 μ . latis, versus apicem lanceolatis, hyalinis.

Hab. in ramis Bambusæ, Rio Grande do Sul Brasiliæ. — *Erinellæ* habitu et sporarum forma vix dissimile, sed est *Lachnum* genuinum sporidiis continuis et paraphysibus lanceolatis.

16. **Lachnum Enzenspergerianum** P. Henn., Deutsche Südpolar-Exped. 5603

Bd. VIII (1906) Extr. p. 6, tab. I, fig. 5, *a, e*. — Ascomatibus ceraceis, sparsis v. subgregariis, stipitatis v. subsessilibus, cupulatis, flavo-carneis, pilosis, c. 250-300 \approx 200-230, margine pilis erectis sicco flexuosis, hyalinis, obtusis, septulatis, subgranulosis, 30-80 \approx 4-5 vestitis, disco concavo, pallido v. subincarnato, ceraceo; stipite brevi, cylindraceo, usque ad 100 \approx 100; ascis clavatis obtusis, octosporis, 50-65 \approx 5-7; paraphysibus superantibus, lanceolatis, acutis, septatis, hyalinis, 4-5 μ . cr.; sporidiis oblique monostichis v. subdistichis, fusoideis, acutis v. obtusiusculis, intus minute guttulatis, continuis, hyalinis, 9-12 \approx 2-2,5.

Hab. in foliis Poæ Cookii in insulis Possessionis, Crozet-Gruppe (E. WINKLER).

17. **Lachnum helotioides** Rehm in Syd. Mycoth. march. n. 1479 et 5604

Discom. p. 884 (1893). — Ascomatibus, subsolitariis, sessilibus, pro more brevissime et tenuiter stipitatis, primo globosis, clausis, dein circulari-apertis et discum concavum, tenuiter maginatum ostendentibus, fere achrois, diaphanis, extus pilis simplicibus, copiosis, obtusis, septatis, glabris, hyalinis, 30-45 \approx 3-4, dense puberulis, siccis albis v. flavidulis, tenuiter ceraceis; ascis clavatis, supra rotundatis, 36-45 \approx 5-6, octosporis, paraphysibus lanceolatis, hyalinis, 5 μ . cr. ascos superantibus obvallatis, apice jodo cærulescentibus; sporidiis subcylindricis, obtusis, rectis v. curvulis, continuis, hyalinis, 8-12 \approx 2-2,5, distichis.

Hab. in foliis adhuc stantibus Caricis acutiformis, Grunewald pr. Berlin Germaniæ (SYDOW). — Var. *Ammophilæ* Rehm, Ann. Myc. III (1905) p. 393. — A typo differt sporidiis minoribus 8,5 \approx 1,5. — In foliis putrescentibus *Ammophilæ arenariæ* prope Warnemünde Mecklenburg Germaniæ.

HELOLACHNUM Torrend, Broteria (1910) p. 53 (Etym. *helos* locus udus et *Lachnum*). — Characteres *Lachni* sed ascoma pilis destitutum.

1. **Helolachnum aurantiacum** Torrend, l. c., cum icone. — Gregarium 5605

breve stipitatum, pulchre aurantiacum, majusculum, 4-10 mm. lat., 4-7 mm. alt.; disco primum concavo et margine circiter 0,5 mm. munito, deinde explanato, extus furfuraceo; stipite 3-5 mm. longo, albescente; ascis clavatis, octosporis, $75-100 \times 5-7$; paraphysibus circ. 16-20 μ . superantibus, sursum lanceolatis, ab basim cuspidis septatis, $100-120 \times 2,5-4$; sporidiis acute fusoides, interdum obtuse ellipsoideis, imo subcuneiformibus, $10-13 \times 1,5-3$, hyalinis, levibus.

Hab. ad radices Ulicis europæi, locis humidis et arenosis prope Tagum, Quinta da Infante, Lusitania. — Habitus quasi *Helotii tubæ*.

TRICHOPEZIZA Fuck. — Syll. VIII p. 401, X p. 20, XI p. 412, XIV p. 777 et 1137, XVI p. 1148, XVIII p. 80.

1. **Trichopeziza Harmandi** Vouaux, Bull. Soc. Mycol. Fr. (1910) p. 153. 5606

— Ascomatibus sparsis, sessilibus, basi attenuatis, superficialibus, primum urceolatis dein scutellatis distincteque marginatis, 0,2-0,3 mm. lat.; disco ceraceo, sordide violaceo; extus pallidius violaceis subpallideque pulverulentis; pilis hyalinis tectis, simplicibus, e septatis, levibus, basi fusca longius crassioribus, atque apice parum inflato obtusoque uncinatis, $30-40 \times 1$, basi $12-14 \times 3-4$; ascis clavatis, apice rotundatis, breviter noduloso-stipitatis, 30×5 , octosporis; foramine immarginato; sporidiis elongato-ellipsoideis, simplicibus, hyalinis, biguttulatis, $7 \times 2,5$; paraphysibus filiformibus 3-4-septatis, apice aliquantulum crassioribus, circ. 2 μ . cr., sæpissime basi ramosis.

Hab. in cortice Aceris Pseudoplatani, Docelles Vosges Gallia (Abb. HARMAND). — *Dasyscyphæ hyalotrichæ* Rehm (quæ etiam ad gen. *Trichopezizam* pertinere videtur) affinis, a qua differt colore et forma pilorum nec non statura minore ascorum sporidiorumque.

2. **Trichopeziza marchica** Kirschst., Verh. Botan. Ver. Brandenb. 5607

XLVIII (1906) p. 46. — Ascomatibus in maculis nigricantibus gregariis, sessilibus, pallide brunneis, præcipue ad marginem pilis numerosis, longis, hyalinis obsitis, primum hemisphæricis, dein applanatis, c. $\frac{1}{4}$ mm. diam.; ascis sessilibus, cylindræis, supra rotundatis, $34-36 \times 4-5$, octosporis; sporidiis oblique monostichis, hyalinis, ellipsoideis, unilocularibus, bi-raro-triguttulatis, $4-6 \times 1,5-2$; paraphysibus paucis, filiformibus.

Hab. in foliis pineis putrescentibus, in silvis prope Rathenow Germaniæ.

3. *Trichopeziza Galii* Boud., Icon. Mycol. t. III, tab. 536 (1907), Hist. 5608
et Classif. Discomyc. Europe (1907) p. 132. — Minutissima, 0,30-0,50 mm. lata, sessilis, albido-cinerea, urceolata, dein expansa, vix roseola, margine pallidiore; extus ad marginem pilis brevibus, obtusis, albis, septatis et extus granulosis; ascis cylindrico-clavatis, octosporis, 40-50 \times 5-7; paraphysibus tenuiter lanceolatis, albis, rarius filiformibus, intus subgranulosis, 2-3 μ . cr.; sporidiis oblongo-fusoideis, sæpe subclavatis, hyalinis, non guttulatis, 9-10 \times 2-3.
Hab. in caulibus emortuis *Galii Aparines*, Montmorency Gallia. — Inter *Lachnellam* et *Trichopezizam* media.

4. *Trichopeziza valparadiasiaca* Speg., Fungi Chilenses (1910) p. 125, 5609
cum icon. — Ascomatibus pusillis dense constipatis, superficialibus, turbinatis, breviter pedicellatis densiuscule villosis, ochroleucis, 150-300 μ . diam., pilis simplicibus non capitatis, levibus 1-3-cellularibus, 50 \times 2-3; ascis subclavulatis breviuscule pedicellatis, 30 \times 4, paraphysibus sursum vix incrassatis obtusis, non longioribus cinctis; sporidiis pusillis ellipsoideis hyalinis minutis biguttulatis, 4 \times 1,5, unilocularibus.

Hab. ad folia emortua *Puyæ chilensis*, Cerro Alegre de Valparaiso Chile Amer. austr.

5. *Trichopeziza velutina* (St. Amand) Sacc. et Trott., *Peziza velutina* 5610
St. Amand Fl. agenaise, Agen, 1821, p. 531. — Minutissima; ascomatibus subsessilibus, primo globulosis, dein oblongatis v. difformibus, flavidis, piloso-velutinis, senio nigricantibus, plerumque dense aggregatis.

Hab. inter muscos et hepaticas ad cortices arborum in agro Agen Gallia. — Verisimiliter affinis *Tr. sulphureæ*, *Tr. leucophææ* etc.

UNGUICULARIA v. Höhn., Ann. Mycol. (1905) p. 404 (Etym. *unguicula* ob pilorum formam). — Ascomata parva, superficialiter insidentia, basi angustata extus pilosa, pilis crasse tunicatis; contextu minute parenchymatico-fibroso; asci clavati, octospori; sporidia 2- vel 3-sticha, unilocularia, elongata; paraphyses tenues. — A *Pezizella* et *Dasyscypha* differt præcipue pilis crassissime tunicatis, acuminatis. Cfr. quoque v. Höhn. in Sitzungsab. K. Akad. Wiss. Wien, CXV (1906) p. 93 (gen. *Unguiculella* v. Höhn.).

1. *Unguicularia unguiculata* v. Höhn., l. c. cum icon. — Ascomati- 5611
bus sessilibus, albo-carneis, primum globoso-clausis dein discoideo-apertis, albis v. pallidis, 200-400 μ . diam., pilis plerumque irregu-

lariter incurvatis, hyalinis, $40-60 \approx 7-9$; ascis tenuiter tunicatis, acute clavatis, octosporis, $40-60 \approx 6-7$; paraphysibus numerosis, $\frac{1}{2}$ μ . cr., filiformibus; sporidiis distichis, unilocularibus, hyalinis, fusoides, utrinque acutatis, $9-12 \approx 2-3$; J +.

Hab. in foliis abietinis dejectis putrescentibus prope Untertullnerbach Wiener Wald Austriae.

2. *Ungicularia hedericola* Rehm, in Strasser, Verh. k. k. z. bot. Ges. 5612 Wien LX (1910) p. 469. — Ascomatibus gregariis, sessilibus, primitus globoso-clausis, dein disco orbiculari, 0,1-0,15 mm. diam., hyalino-fuscidulo, excipulo-flavescente, versus marginem prosenchymatice contextis, hyphis marginalibus cellulis conoideis, demum tenuiter hamulato-reflexis, scabris, 15-18 μ . long. ad basim 5 μ . latis coronatis, siccis contractis: ascis clavatis, apice rotundatis, $40-45 \approx 7-8$, octosporis, jodo immutatis; sporidiis obliquis, unicellularibus, biguttatis, hyalinis, $5-8 \approx 3,5-4$, plerumque monostichis; paraphysibus filiformibus, hyalinis, ad apicem 1,5-2 μ . cr.

Hab. in ramulo Hederæ Helicis decorticato, Hollenstein Austria inf.

3. *Ungicularia falcipila* v. Höhn., Sitzb. k. Ak. d. Wiss. Wien CXV, 5613 Abt. I (1906) p. 654. — Ascomatibus superficialibus late insidentibus, applanatis, tenuibus, solitariis v. gregariis, pallide carneis, 100-240 μ . diam., extus pilis hyalinis, unicellularibus, 20-24 μ . long., basi 3-4 μ . lat. fortiter hamatis vestitis; ascis late insidentibus, clavatis, obtusis, tenue tunicatis, tunica supra usque ad 2 μ . cr., octosporis; sporidiis distichis, hyalinis, unilocularibus, elongatis, subcylindraceis, rectis v. vix incurvatis, minute uni- v. biguttulatis, utrinque rotundatis, $5,5-7 \approx 1,5-2$; paraphysibus paucis filiformibus; J-.

Hab. in caulibus putrescentibus Urticæ dioicæ, Wiesenbachtal Austriae inf.

4. *Ungicularia limosa* Rehm in Jaap, Abh. Bot. Ver. Prov. Brandenburg. LII (1910) p. 118. — (Nomen nudum).

Hab. in caulibus putrescentibus Equiseti limosi prope Triglitz in Germania.

DASYSCYPHA (Fr.) Fuck. — Syll. VIII p. 432, X p. 21, XI p. 412, XIV p. 779, XVI p. 735, XVIII p. 81.

1. *Dasyscypha Rosæ* Jaap, Verh. Bot. Ver. Prov. Brand., L (1908) 5615 p. 31. — Ascomatibus minutis, gregariis, plerumque hypophyllis, sessilibus, primum globoso-clausis, dein circulariter apertis et discum

pallidum ostendentibus, margine incurvato, flavis et pilis flavidis 2,5-3,5 μ . cr., basi septatis et 100-200 μ . long. præditis; siccis fere globosis et flavo-brunneis, subverrucoso-rugosis, tenui-ceraceis; ascis elongato-clavatis, supra obtuse acutatis, 25-32 \times 5-6, octosporis; sporidiis elongatis v. subclavatis, 5-8 \times 1,5, rectis, unilocularibus, sæpe biguttulatis, hyalinis, oblique distichis; paraphysibus filiformibus, obtusis, 2 μ . cr.; J +.

Hab. in foliis vetustis Rosæ centifoliæ prope Triglitz in Brandenburgia Germaniæ.

2. *Dasyscypha campylotrichia* A. L. Sm., Trans. Brit. Mycol. Soc. 5616 (1908) v. III (1909) p. 112, tab. VI, fig. 3. — Ascomatibus minutis, 150-200 μ . circ. diam., sparsis v. subgregariis, primum clausis, siccis flavo-citrinis, udis apertis et discum parum ostendentibus, extus et præcipue ad marginem pilosis, pilis sursum subulatis, subincurvatis 30-45 \times 4 præditis; ascis clavatis breviter stipitatis, circ. 35 \times 8; sporidiis parvis, ellipsoideis, hyalinis, 5 \times 2.

Hab. in caulibus Cardui spec, Scone Perthshire Britannia (MENZIES).

3. *Dasyscypha pulverulenta* (Lib.) Sacc. — Syll. VIII, pag. 462. — 5617 var. *conicola* Rehm in Sydow, Ann. Mycol. (1910) p. 492, Myc. Germ. n. 907. — A typo differt pilis non resiniferis.

Hab. ad squamas conorum Pini, Triglitz? in Germania. — Probabiliter eadem est var. *conorum* Rehm in Jaap, Verhandl. bot. Ver. Brandenb. LII (1910) p. 115. — Var. *purpurascens* Rehm, Ascom. Exsicc. fasc. 46, n. 1877, Ann. Mycol. (1910) p. 298. — A typo differt pilis rectis, asperis, hyalinis, 60 \times 4, contentu crystallodeo-resinoso rubro-brunneo purpurascenti. — In foliis putrescentibus Pini silvestris, Triglitz in Priegnitz Germaniæ.

4. *Dasyscypha fusco-sanguinea* Rehm — Syll. VIII, p. 459 — var. 5618 *aurantiaca* v. Höhnelt ap. Rehm, Ann. Mycol. III (1905) p. 230. — Disco vitellino v. aurantiaco a typo dignoscenda.

Hab. in cortice Pini montanæ, Rudolfshütte in Stubachthal, Salzburg (v. HÖHNEL).

5. *Dasyscypha Körberii* (Peyl) Sacc. et Trav., *Peziza Körberii* Peyl, 5619 Besch. einiger neuer Pilze in Lotos VIII (1858) p. 31, t. I, f. 20. — Ascomatibus sparsis, in stipitem brevissimum tenuatis, minutissimis, madore tantum apertis, trochiformi-globosis, extus setulis rigidulis, nitide albis, crystallinis, apice rotundatis dense vestitis; disco concavo albo; ascis tereti-clavatis, paraphysatis, in stipitem

longiusculum tenuatis, apice rotundatis, octosporis; sporidiis oblique monostichis, ellipsoideis, hyalinis.

Hab. in foliis Fimbristylis gracilis in calidariis in Bohemia. — Affinis *Dasyscyphæ niveæ*.

6. *Dasyscypha subbadiella* Rehm, Ann. Mycol. V (1907) p. 534. — 5620

Ascomatibus gregariis, sessilibus, subobconicis, clausis, demum patellaribus, badio-hirtellis, 0,15 mm., excipulo parenchymatico fusco, pilis simplicibus, rectis, obtusis, glabris, septatis, fuscis, ad apicem dilutioribus, $120 \times 5-6$ obesso; ascis clavatis, apice rotundatis, $35-40 \times 6$, octosporis, jodo tinctis; sporidiis fusiformibus, rectis v. curvatis, 1-cellularibus, utrinque 1-guttulatis, hyalinis, 10×2 , distichis; paraphysibus filiformibus 2 μ . cr.

Hab. ad folia sicca putrescentia Caricis ampullaceæ, Sayser Alpe, Graubünden, Helvetiæ (Dr. VOLKART). — Vix visibilis; a *Lachno badiello* imprimis paraphysium forma diversa.

7. *Dasyscypha perplexa* Boud., Icon. Mycol. t. III, tab. 542 (1907), 5621

Hist. et Classif. Discomyc. Europe (1907) p. 120. — Minuta, 0,60-1 mm. lata, alba, hymenio pallide lutescente; ascis clavatis, minutis, foramine immarginato, $40-45 \times 6-7$; paraphysibus elongatis, fusoido-acutis, ad basim septatis, albis, intus minute granulosi, $70-75 \times 4$; sporidiis oblongo-fusoides, intus non aut rarius granulosi, $10-12 \times 2-3$.

Hab. ad folia emortua Caricis maximæ, Montmorency, Gallia. — Habitu *Erinellæ juncicolæ* sed sporidiis non filiformibus distincta.

8. *Dasyscypha caricicola* (Lasch) Sacc. et Trott., *Peziza caricicola* 5622

Lasch in Klotzsch Herb. viv. Mycol. n. 1531. — Breviter stipitata, hemisphaerica, albo-villosa, disco aureo.

Hab. in Caricis sp in Germania. — An *Dasyscypha Caricis*?

9. *Dasyscypha Typhæ* Jaap, Verh. bot. Ver. Prov. Brandenb., LII 5623 (1910) p. 115. — (Nomen nudum).

Hab. in foliis vetustis putrescentibus Typhæ angustifoliæ, prope Triglitz in Brandenburgia.

10. *Dasyscypha Winteriana* Rehm, Discom. in Krypt. Fl. III, p. 840 5624

et 826 (icon.). — Ascomatibus gregariis, sessilibus, calyciformibus, primo clausis, ovoideis vel in stipitem brevem tenuatis, dein circulariter hiascentibus et discum concavum, hyalinum ostendentibus, diaphanis, albo-flavidulis, extus flavido-rubellis et pilis laxiusculis, curvulis, septatis, hyalinis, brevibus, 3 μ . cr. conspersis, siccis contortis v. flexis, 250-300 μ . diam., ceraceis; ascis clavatis late

sessilibus, apice obtusule acutatis, $40-50 \times 7-8$, octosporis; sporidiis fusioideis, subrectis, 1-cellularibus, utrinque 1-guttulatis, demum diblastis, $12-15 \times 2$, distichis; paraphysibus filiformibus, $1,5 \mu$. cr.

Hab. in petiolis putrescentibus *Asplenii Filicis-feminæ* pr. Königstein a. E. Saxoniae (KRIEGER). — Var. *tetraspora* Rehm, l. c. p. 841. — Ascis tetrasporis; sporidiis $15-18 \times 2-3,5$, continuis. — In eadem matrice, Rigi Helvetiæ (WINTER).

11. *Dasyscypha flavidula* Rehm, Ann. Mycol. VII (1909) p. 542. — 5625

Ascomatibus in rimis stipitis arcte congregatis, sessilibus, tenuissime stipitatis, cyathoides, pseudoparenchymatice contextis, pilis sparsis, septatis, subcurvatis, obtusis, scabris, hyalinis v. dilute flavidulis, c. 50×4 obsessis, c. 250μ . diam., stip. 100μ . lato, $0,3$ mm. alto, albo-flavidulis, siccis aureis; ascis clavatis, apice rotundatis, $40-45 \times 4-5$, octosporis, jodo immutatis; sporidiis oblongis, utrinque obtusis, rectis, 1-cellularibus, hyalinis, $6-7 \times 1,5-2$, 1-2-stichis; paraphysibus filiformibus, $2,5 \mu$. cr., hyalinis.

Hab. ad stipites *Filicis?* Sao Leopoldo Rio Grande do Sul Brasiliae (THEISSEN S. J.). — *D. Pteridis* colore et structura valde distincta.

12. *Dasyscypha abscondita* Massee, Kew Bull. n. 46 (1906) pag. 46, 5626

fig. 1-6. — Ascomatibus $1,5-2$ mm. alt., 1 mm. lat. gregariis, primo globosis dein cupulatis, stipitatis, extus margineque pilosis, albidis; pilis hyalinis, septatis, clavatis, $60-80 \times 7-10$; ascis cylindraceis, octosporis, $50 \times 6-7$; sporidiis hyalinis, ellipsoideis, 5×2 ; paraphysibus filiformibus.

Hab. gregaria in Horto bot. Kew Angliæ (G. NICHOLSON).

13. *Dasyscypha inconspicua* P. Henn., Verh. Bot. Ver. Prov. Bran- 5627

dbg. L (1908) p. 134. — Ascomatibus foliicolis subsessilibus, minutis, subglobosis, albidis, pilis hyalinis vix septatis, $60-140 \times 4-5$, erectis vestitis, disco albo, levi, c. 150μ . diam.; ascis clavatis, obtusis, octosporis, $22-30 \times 4-4,5$; paraphysibus filiformibus, hyalinis, c. $1-1,5 \mu$. cr.; sporidiis subdistichis, oblongis, rectis v. curvulis, obtusiusculis, hyalinis, $5-6 \times 1,5-2$.

Hab. ad folia putrida prope Tamsel, Germania (VOGEL). — Ob staturam et indumentum pilorum distincta.

14. *Dasyscypha Fairmani* Rehm, Ann. Mycol. VII (1909) p. 535. — 5628

Ascomatibus gregariis, sessilibus, primitus globoso-clausis, dein urceolatis, demum explanatis, disco orbiculari, dilute carneo, $1-2$ mm. diam., ceraceis, excipulo pilis longissimis, simplicibus, vario modo curvatis, obtusis, septatis, glabris, fuscidulis, versus apicem hya-

linis, perlongis, 4 μ . cr. vestito, siccis urceolatis, disco flavidulo; ascis clavatis, apice rotundatis, 50-60 \approx 7-8, J-, 8-sporis; sporidiis oblongo-cylindræis, utrinque obtusis, unicellularibus, utroque apice parviguttulatis, hyalinis, 12-14 \approx 3, distichis; paraphysibus filiformibus, 2 μ . crassis.

Hab. ad lignum putridum in silvis, Lyndonville, New York Amer. bor. (E. FAIRMAN). — *Das. albo-luteæ* proxima sed sporidiis majoribus distincta.

15. *Dasyscypha atropila* Boud., Icon. Mycol. t. III, pl. 505 (1907), 5629 Hist. et Classif. Discomyc. Europe (1907) p. 121. — Minuta 0,5-1 mm. lata et alta, pedunculata, ochracea, pilis elongatis nigris et septatis dense vestita; ascis clavatis, octosporis, 55-60 μ . long.; paraphysibus acutis, ascos paulo tantum superantibus, hyalinis, 4-5 μ . cr.; sporidiis oblongo-fusoideis; albis, intus non granulosi, 12-14 \approx 2,5-3; pilis septatis, acutiusculis, sub lente composita brunneis, 140-300 \approx 5-7.

Hab. in ramulis putrescentibus *Aceris* (?), Jura, Gallia. — *A. D. relicina* Fr. ascomatibus minoribus distincte stipitatis et pilis atris distincta.

16. *Dasyscypha citricolor* (B. et Br.) Massee — Syll. XVIII, p. 85 5630 — Huc ducenda est *Trichopeziza vitricolor* (B. et Br.) Sacc. (ex errore pro *citricolor*) — Syll. VIII, p. 411.

Sect. 2. Phæosporæ.

ALEURINA Sacc. — Syll. VIII, p. 472, XVI p. 738, XVIII p. 88.

1. *Aleurina subapiculata* von Höhnelt, Stzb. k. Ak. d. Wiss. Wien, 5631 CXVIII, Abt. I (1909) p. 397. — Ascomatibus gregariis, patelloideis, late adnatis, margine incurvato revoluti, 5-7 mm. latis, 400-450 μ . cr., e brunneo-olivaceo nigricantibus, extus glabris, rugulosis; excipulo grosse parenchymatico 200 μ . cr.; ascis cylindræis, octosporis, 270 \approx 12; paraphysibus filiformibus, 1,5-2 μ . cr., supra clavatis et 6-9 μ . latis, brunneolis; sporidiis monostichis, ellipsoideis, utrinque subangustatis, apice acutatis v. apiculo hyalino usque ad 2 μ . longo præditi, pallide brunneolis, biguttulatis, minute granuloso-rugulosis, 18-22 \approx 8-9,5.

Hab. in latere interiore corticis putrescentis, Tjibodas in ins. Java. — *A. ochraceæ* (Mass. et Rod.) et præcipuæ *Aleur. apiculatæ* (Cooke) affinis.

2. *Aleurina Readeri* Rehm, Ann. Mycol. VI (1908) p. 324. — Asco- 5632
matibus sparsis vel aggregatis, primitus subturbinatis, dein patel-
laribus, planis, tenuissime marginatis, demum disco orbiculari con-
vexulo, medio umbonato, 7-10 mm. diam., extus glabris, itemque
stipite crasso, cylindraceo, 5-7 mm. longo, 3-4 mm. crasso, versus
basim subincrassato, sordide albidulis vel albido-ochraceis, carno-
sis; ascis cylindraceis, apice rotundatis, haud incrassatis, 150 × 9-
10, octosporis jodo immutatis; sporidiis oblongo-ellipsoideis, 1-cel-
lularibus, haud guttatis, primitus hyalinis, demum fuscidulis, gla-
bris, 12-14 × 6, monostichis; paraphysibus filiformibus, septatis,
intus granulatis, hyalinis, 2 μ . crassis usque ad apicem.

Hab. ad terram?, Co. of Folett, Victoria Australiae (F. M. READER). — *Aleurinae substipitatae* et *A. olivaceae* subaffinis.

Sect. 3. Hyalodidymæ.

HELOTIELLA Sacc. — Syll. VIII p. 474, XI p. 415, XIV p. 782,
XVI p. 740, XVIII p. 93.

1. *Helotiella Maireana* Rehm, Ann. Mycol. IV (1906) p. 440. — A- 5633
scomatibus gregariis, sessilibus, subcyathoideis, primitus globoso-
clausis, dein disco orbiculari plano, tenuissime marginato, 0,15-
0,25 mm. lat., extus glabris, in stipitem brevissimum crassum elon-
gatis, 0,2 mm. alt., hyalino-citrinulis, siccis distinctius stipitatis,
excipulo ceraceo pseudoparenchymatico hyalino; ascis cylindraceo-
clavatis, apice rotundatis incrassatisque, 60-70 × 5-6, octosporis,
poro jodo tincto; sporidiis oblongis, utrinque subattenuato-rotun-
datis, medio crasse septatis, haud constrictis, utrinque juxta se-
ptum 1-guttulatis, hyalinis, 7-8 × 2,5, oblique 1-stichis (interdum
in apice asci 2-stichis); paraphysibus filiformibus, hyalinis, 3 μ .
crassis.

Hab. in cupulis dejectis *Quercus cocciferæ* prope Olym-
pian Elidis Græciæ (R. MAIRE). — Hinc *Helotio herbarum* illinc
Phialeæ subpallidæ et *Ph. alniellæ* affinis, sed sporidia crasse 1-
septata.

2. *Helotiella Bubákii* Rehm, Ascom. exs. n. 1679, Ann. Mycol. V 5634
(1907) pag. 78. — Ascomatibus cæspitosis, plerumque 2-20 arcte
congregatis, rarius solitariis, per epidermidem prorumpentibus,
dein fere sessilibus, cyathoideis, primitus globoso-clausis, mox di-
sco orbiculari tenuiter marginato explanato, demum subimmargi-

nato et complicato, dilute albido-flavidulis, siccis flavescentibus, in stipitem brevissimum elongatis, 0,2-0,5 mm. diam., excipulo prosenchymatice contexto, hyalino; ascis clavatis, apice rotundatis et subincrassatis, $90-100 \approx 8-9$, jodo tinctis; sporidiis fusoides plerumque rectis, medio septatis, utraque cellula guttis oleosis magnis 2 repleta, demum 3-septatis, hyalinis, $12-15 \approx 4-5$, distichis; paraphysibus filiformibus, 2 μ ., versus apicem 3 μ . cr., hyalinis.

Hab. in silvis umbrosis ad flumen Luznica in ramis emortuis *Salicis fragilis* (BUBAK). — Ob sporidia demum (genuine?) 3-septata ad *Belonium* vertit.

3. *Helotiella Rehmii* (Strasser) Sacc. et Trott., *Helotium Rehmii* Stras- 5635
ser, Verh. k. k. zool. bot. Gesellsch. Wien LVII (1907) p. 332, *Helotium lutescens* Rehm, Ascom. exsicc. n. 1719 b. — Ascomatibus plerumque gregariis, raro ad corticem putrem insidentibus, sæpe sub cortice orientibus vel intra rimas corticales nidulantibus, primum subturbinatis et demum depresso-discoideis, tenui-ceraceis, glabris, stipite et disco flavo-citrino, siccis flavo-auratis; disco ad marginem acie tenui flavido-viridi, 1-2 mm. lat., stipite quandoque usque ad 1 mm. long.; ascis elongatissime clavatis, apice rotundatis, $140-160 \approx 12-13$; sporidiis supra distichis infra monostichis, ellipsoideis vel obtuse fusoides, hyalinis, uniseptatis, quandoque triseptatis, ad septa constrictis, plerumque $18-23 \approx 6-8$; paraphysibus ramosis, apice flavidis, 2 μ . cr., apice crassiusculis, 2,5-3 μ . J +.

Hab. ad cortices abietinos putres, Sonntagberg Austriae inferioris.

4. *Helotiella discula* (Ferdinands. et Winge) Sacc. et Trott., *Helotium* 5636
discula Ferd. et Winge, Botanisk Tidsskrift XXX (1910) p. 211, fig. 1. — Ascomatibus gregariis, sessilibus, juvenilibus cupulatis, maturis discoideo-explanatis, disco subconvexo, carnosulis, ad 750 μ . diam., flavidis v. (in sicco) succineis, extus glabris; ascis cylindraceo-clavatis, sessilibus, $43-56 \approx 4,75-6,50$, sporidia nonnunquam 8, sæpius, - nonnullis frustratis - pauciora foveantibus; sporidiis oblique monostichis, fusiformibus, utrinque acutiuscule rotundatis, primo bi-guttulatis, ad maturitatem medio 1-septatis, non constrictis, $10,5-14 \approx 2,5-3,7$ hyalinis; paraphysibus filiformibus, non septatis, 1 μ . circ. cr., hyalinis, superne in clavulam usque ad 5 μ . cr., substantia oleosa, flavida repletam subito dilatatis, ascos parum superantibus; membrana tota ascorum nec non paraphysibus jodo ope intense caerulescentibus.

Hab. ad lignum subputridum decorticatum prope Las Trincheras Venezuele (H. LASSEN).

5. *Helotiella Werthiana* P. Henn., Deutsche Südpolar-Exped. Bd. VIII 5637 (1906) Extr. pag. 7, tab. I, fig. 7, *a, e*. — Ascomatibus ceraceis, sessilibus, sparsis v. gregariis, primo subgloboso-clausis, dein cupulatis, extus subviolaceo-brunneolis, marginatis, circ. 300-380 μ . diam., disco concavo v. subplano, fusco-brunneo dein pallescenti, levi; ascis cylindraceo-clavatis, obtusis, octosporis, $45-60 \times 6-10$; paraphysibus filiformibus, ramosis, hyalinis, $1,5-2 \mu$. cr.; sporidiis fusoides, subacutis, rectis, medio septatis, haud constrictis, hyalinis, eguttulatis, $10-12 \times 4$.

Hab. in foliis *Poæ Cookii*, in ins. Possessionis, Crozet-Gruppe (E. WERTH).

6. *Helotiella Drygalskiana* P. Henn., Deutsche Südpolar-Exped. Bd. 5638 VIII (1906) Extr. p. 6, tab. I, fig. 6, *a, e*. — Ascomatibus ceraceis, sparsis v. subgregariis, sessilibus, primo subglobosis, clausis, dein cupulatis, violaceo-brunneis, subradiato-striatulis, c. 300-330 μ . diam., disco pallido, concavo; ascis cylindraceo-clavatis, obtusis, 8-sporis, c. $30-35 \times 3-4$; paraphysibus lanceolatis, superantibus, acutis, c. 40×4 ; sporidiis oblique monostichis v. subdistichis, rectis v. curvulis, ellipsoideis v. fusoides, medio 1-septatis, hyalinis, $7-8 \times 3-3,5$.

Hab. in foliis *Poæ Cookii*, in ins. Possessionis, Crozet-Gruppe (E. WERTH).

7. *Helotiella nerviseda* Rehm, in Strasser Verh. k. k. zool.-bot. Gesellsch. Wien LVII (1907) p. 333. — Ascomatibus epiphyllis et plerumque ad nervos foliorum putrescentium sparse insidentibus, primum cylindraceo-clausis dein calyciformi-apertis demum tenuiter et depresso marginatis, $0,2-0,5$ mm. lat., basi in pedicellum cylindraceum curvulum 1 mm. long. circ. 0,2 mm. cr. attenuatis, e pallide flavis stramineis, excipulo glabro prosenchymatico; ascis clavatis, supra rotundatis, octosporis, 100×10 , J +; sporidiis ellipsoideis, obtusiusculis, rectis, subinæqualibus, bilocularibus, ad septum vix constrictis, hyalinis, 15×5 , distichis; paraphysibus filiformibus, 2 μ . crassis, supra usque ad 4 μ ., hyalinis.

Hab. ad folia putrescentia, Sonntagberg Austriæ inf.

PSOROTHECIOPSIS Rehm — Syll. XVI p. 746, XVIII p. 98.

1. *Psorotheciopsis decipiens* Rehm — Syll. XVI, p. 746 — var. bi- 5640
spora Rehm, Hedwigia XLVII (1905) p. 11, fig. 9. — Ascis pi-

riformibus, sessilibus, versus apicem elongatis, $80 \approx 40$, bisporis; sporidiis demum $50-60 \approx 25-30$.

Hab. ad folium Guatteriae australis, Blumenau Amer. austr. (ULÉ).

NIPTERA Fr. em. Sacc. — Syll. VIII p. 480, X p. 24, XI p. 416, XIV p. 784, XVI p. 471, XVIII p. 94.

1. **Niptera Lychnidis** (Fuck.) Lind, Vidensk.-Selskab. Skrif. Math. 5641 Naturw. Kl., Christiania (1909) n. 9, Extr. pag. 13, *Micropeziza Lychnidis* Fuckel, Oudemans, Fl. mycol. Nowaja Semlja (1885) tab. II, fig. 10. — Ascis ellipsoideis utrinque attenuatis, breve stipitatis, tenue tunicatis, curvulis, 8-sporis, $60 \approx 12$; paraphysibus numerosis; sporidiis ellipsoideis, falcatis, hyalinis, inæqualiter bipartitis, $18-22 \approx 4-5$.

Hab. in foliis emortuis Melandrii apetalii fm. arcticæ, King William Land Americæ Arcticæ.

2. **Niptera Gaduæ** P. Henn., Hedwigia XLVII (1908) pag. 270. — 5642 Ascomatibus sparsis superficialibus, sessilibus, cupulato-patellatis, ceraceis, marginatis, ca. 300 μ . diam., extus subpallidis, disco incarnatis; ascis subclavatis apice rotundato-obtusis, 8-sporis, $40-50 \approx 3,5-5$, paraphysibus filiformibus hyalinis, 1-1,5 μ . crassis, apice clavatis, c. 2 μ . incrassatis; sporidiis oblique monostichis v. subdistichis, ellipsoideis, 1-septatis, haud constrictis, $6-11 \approx 2,5 \approx 3$,

Hab. in ramulis Gaduæ? sp. in societate *Balansiae regularis* Möll., Amazonas, Juruá-Miry.

3. **Niptera chilensis** Speg., Fungi Chilenses (1910) p. 126, cum icon. 5643 — Ascomatibus hinc inde pauci-gregariis constipatis, udis patellaribus, siccis contracto-difformibus, minutis, extus fusco-ferrugineis, coriaccellis, intus melleis, subceraceis, 0,5-1,5 mm. diam.; ascis clavatis sursum subacutiusculis, deorsum longiuscule attenuato-pedicellatis, 90-100, p. sp. $60-70 \approx 7-9$, paraphysibus filiformibus vix longioribus apice 2-3 μ . subincrassatulis et acutiusculis obvallatis; sporidiis monostichis e fuscoideo subbotuliformibus medio 1-septatis, non constrictis, hyalinis, parvis, $11-14 \approx 3$.

Hab. in ramis erosio plantæ ignotæ (? *Ætoxicæ*), Cerro Caracol de Concepcion, Chile Amer. austr.

4. **Niptera Mülleri-Argoviensis** Rehm, Ann. Mycol. IV (1906) p. 340 5644 et VI (1908) p. 324. — Ascomatibus gregariis, in maculis dilute denigratis sessilibus, hypophyllis, primitus globoso-clausis, dein disco urceolato hyalino, fimbriato-marginato, extus fusco-nigris, a-

sperellis, siccis imprimis corrugatis et involutis, excipulo parenchymatico e cellulis fuscis subrotundis usque ad 15 μ . contexto, versus marginem seriebus hypharum simplicibus, interdum subramosis, septatis 4-5 μ . crassis, cellula apicali obtusa clavata 10-20 \approx 5-8 coronatis, subfuscis, ceraceis, 300-350 μ . diam.; ascis clavatis, apice rotundatis, sessilibus, 35-40 \approx 5-7, octosporis, poro jodo tincto; sporidiis cylindraceis, rectis, medio septatis, haud constrictis, hyalinis, 10 \approx 1,5, distichis; paraphysibus filiformibus, septatis, 1,5 μ ., versus apicem 2,5 μ . crassis, hyalinis.

Hab. ad folia Quercus Ilicis, Cavalaire Galliae australis (MÜLLER-ARGOV. in Herb. BARBEY-BOISSIER).

5. *Niptera ramicola* Rehm, in Feltg. Vorst. Pilz.-Fl. Luxemb. IV 5645 (1905) p. 27, *N. ramealis* Karst. sec. Rehm olim. — A *N. rameali* sec. Feltgen, loc. cit. differt sporidiis utrinque obtusis, 9-15 \approx 2-3.

Hab. in ligno fagineo, in ramis Daphnes Mezerei et Symphoricarpi, Luxemburgia.

6. *Niptera caricicola* Speg., Myc. Arg. IV in An. Mus. Buenos Aires 5646 (1909) pag. 449. — Pusilla, superficialis, laxe gregaria, atra, glabra, amphigena, latiuscule matrici adnata, plano-concaviuscula, 200-350 μ . diam., margine integra, contextu fulvello indistincto; ascis subfusoideis utrinque leniter tenuatis, apice subrotundatis, 80 \approx 10, crassiuscule breviter pedicellatis, octosporis, obturaculo jodi ope cærulescente; paraphysibus filiformibus sursum non incrassatis; sporidiis elongato-ellipsoideis, oblique distichis, utrinque acutiusculis, 14-15 \approx 3,5-4, rectis, primo continuis dein diblastis, non constrictis, hyalinis.

Hab. ad folia arida Caricis cujusdam in herbosis secus Rio Carrenleofü, Patagonia, Argentina.

LINHARTIA Sacc. et Syd. — Syll. XVI p. 744, XVIII p. 95.

1. *Linhartia Höhnellii* Rehm, Hedwigia XLVII (1905) p. 11. — Asco- 5647
matibus in medio macularum epiphyllarum dispersarum, orbicularium, 1 mm. lat., e cellulis prosenchymaticis centrifugis c. 10 \approx 4-5, dilute flavidulis contextarum, membranacearum, 2-4 sessilibus, primitus globoso-clausis, mox apertis, patellaribus, orbicularibus, disco hyalino, margine tenuissimo fuscidulo, e cellulis elongatis fuscis composito cincto, 220-250 μ . diam., siccis globulosis, fuscis; ascis clavatis, apice rotundatis, 60-90 \approx 8-10, octosporis; sporidiis elongato-fusoideis, medio septatis et valde constrictis, strato mucoso

tenui obvolutis, hyalinis, 15-18 \times 3, distichis, paraphysibus filiformibus, 1,5 μ . cr., hyalinis; J-.

Hab. ad folia Psidii, Petropolis prope Rio de Janeiro Amer. austr. (v. HÖHNEL).

Sect. 4. Hyalophragmiæ.

PUTTEMANSIA P. Henn. — Syll. XVIII p. 98.

1. *Puttemansia lanosa* P. Henn. — Syll. XVIII p. 98 — var. uni- 5648
caudata Rick, Broteria V (1906) p. 32. — A typo differt cellula
caudiformi unica, sporidiis paullo minoribus (sed revera etiam in
typo sporidia sunt tantum unicaudata).

Hab. in foliis Lauracæ cujusdam, Rio Grande do Sul Brasilæ.

BELONIELLA Sacc., Consp. Discom in Bot. Centralbl. XVIII (1884)
pag. 219, em. Rehm, Disc. pag. 638 — Syll. XIV p. 786, XVI
p. 1149.

1. *Beloniella Galii-veri* (Karst.) Rehm — Syll. VIII, p. 356 [*Pyre-* 5649
nopeziza] — var. *subalpina* Rehm, Ann. Myc. III (1905) p. 411
et Ascom. exsicc. fasc. 35, n. 1607. — Ascomatibus 1,5 mm. diam.,
in sicco epidermide nigrescente caulis obtectis, udis globose pro-
minentibus, disco pallide roseolo, primitus orbiculari, dein sæpe ob-
longo, margine albidulo fimbriatulo cincto.

Hab. in caulibus Galii sp. supra Feilenbach Alpium Baviaræ
(Doct. REHM).

2. *Beloniella Brunellæ* Lind., Ann. Mycol. V (1907) p. 274 et Rehm 5650
Ascom. Exs. n. 1728, Ann. Myc. V (1907) p. 466. — Subiculo per
radices et stipites usque in folia viva serpente, atro, in foliorum
imprimis superiore pagina fibrillose orbiculariter v. stellatim 1 cm.
lat. expanso; ascomatibus sæpe congregatis, innatis, dein pro-
rumpentibus, primitus globoso-clausis, demum disco explanato, ci-
nereo-albo, crasse marginato, 0,5 mm. lat., excipulo crasso, scabro,
extus parenchymatico fusco, intus hyalino; ascis clavatis, apice
rotundatis, 60-70 \times 10-12, octosporis; J +; sporidiis subellipsoideis,
utrinque obtusis, primitus 1-cellularibus, guttis oleosis 2 magnis
repletis, demum 2-(4) cellularibus, hyalinis, 15-17 \times 4,5-5, distichis;
paraphysibus filiformibus 1,5 μ ., versus apicem 3 μ . cr., hyalinis.

Hab. ad parasitice *Brunellam vulgarem*, Silkeborg Jutland, Dania.

3. *Beloniella biseptata* Ferdinands. et Winge, Bot. Tidsskr. XXVIII 5651 (1907) p. 252, cum icon. — Ascomatibus epiphyllis, initio immersis, globosis, plus minusve superficialibus, cupulatis, subplanis, 125-185 μ . diam., disco atro-cinereo; ascis clavatis, deorsum leniter attenuatis, sessilibus, poro J +, 50-70 \times 8,5-10; sporidiis 4- v. 8-nis, cylindraceis v. cylindraceo-ovoideis, utrinque rotundatis, biseptatis, 8,5-12 \times 2,5-4, hyalinis; paraphysibus simplicibus v. sparsim ramosis, ascos æquantibus, superne clavatis.

Hab. ad folia sicca *Veronicæ agrestis*, prope Borris Jutlandiæ.

4. *Beloniella Bromeliacearum* Rick, Broteria v. V (1906) p. 36. — 5652 Ascomatibus erumpentibus, gregariis, 1 mm. latis, primitus globosis et hyphis laxis hyalinis tectis, denique disco rubro-coopertis, margine fimbriato, extus luteo-rubris; hypothecio crasso, ceraceo; ascis 50-60 \times 12, sessilibus; sporidiis ellipsoideis, hyalinis, bicellularibus, in septo non constrictis, 7-12 \times 6, biguttulatis, uni- v. biseriatis; paraphysibus parum evolutis.

Hab. in foliis putridis *Bromeliaceæ* epiphytæ, Rio Grande do Sul Brasilæ.

BELONIDIUM Mont. et Dur. — Syll. VIII p. 496, X p. 27, XI p. 417, XIV p. 786, XVI p. 749, XVIII p. 103.

1. *Belonidium bilimbioides* Rehm, Ann. Mycol. V (1907) p. 533. — 5653 Ascomatibus in maculis epiphyllis parvulis, albidulis dispersis, sessilibus, primitus globuloso-clausis, dein urceolatis, tenuissime marginatis, disco hyalino, excipulo parenchymatico, flavidulo, c. 300 μ . diam., siccis convoluto-clausis, subfuscis; ascis fusiformibus, crasse tunicatis, sessilibus, 4-8-sporis, 150-170 \times 25-30, jodo immutatis; sporidiis fusiformibus, utrinque subacutatis, rectis vel subcurvatis, transverse 23-25-septatis, hyalinis, 90 \times 12-14, parallele positis; paraphysibus ramosis, tenerrimis, hyalinis, 1 μ . cr.; hypothecio hyalino.

Hab. ad folium *Myrtaceæ*, Sao Paulo, Brasilæ (USTERI). — Habitus lichenoideus sed gonidia desunt; forte *Lecanice fugienti* affinis species.

2. *Belonidium heterospermum* (Schulzer) Sacc. et Trott., *Peziza heterosperma* Schulz. (Æsterr. bot. Zeitschr. (1878) p. 320. — Ascomatibus totis albis, sessilibus, initio globulosis, dein scutellatis, regularibus,

150-300 μ . diam., margine elevato integro; excipuli contextu molliusculo, ex hyphis tenuibus divergentibus conflato; ascis clavatis, octosporis, paraphysibus paucis, interdum apice capitulatis; sporidiis subdistichis, 3-septatis, hyalinis, oblongo-ovoideis, curvulis, 6-7 \approx 2,5, basi in appendicem cylindraceam paullo angustiore septatam 10 μ . longam desinentibus.

Hab. in ligno Fraxini putrescente in silvis prope Vinkovce Hungariæ. — Ascomata mycelio brunneo *Helminthosporii goniotrichi* Corda (conid. 32-34 \times 10-12, brunneis, 6-7-septatis) insident, teste auctore. Cl. Rehm ad *Belon. Aureliam* refert, sed e descriptione satis recedit.

3. *Belonidium javense* v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII, 5655

Abt. I (1909) p. 382. — Ascomatibus superficialibus, sparsis, late adnatis, margine incurvato, leniter revoluti, obscure brunneo, 0,7-1,5 mm. latis, 210 μ . cr., subpatellaribus, irregulariter rotundatis, extus levibus nigro-brunneis, disco udo albido-cyaneo, siccis sordide flavido-albo; ascis cylindraceis, supra acutatis, octosporis, 72-75 \approx 8; paraphysibus filiformibus simplicibus, 2-2,5 μ . cr.; sporidiis hyalinis, cylindraceis, rectis v. curvulis, utrinque angustatis, obtusulis, plerumque 5-6-septatis, 21-32 \approx 3, plerumque 25-30 \approx 3, distichis v. tristichis; contextu parenchymatico, hypothecio 120 μ . cr., intus hyalino extus obscure brunneo. J +.

Hab. in ligno putri, Tjibodas in ins. Java.

4. *Belonidium succineum* Rehm, Ann. Mycol. VII (1909) p. 540. — 5656

Ascomatibus dispersis hypophyllis, in macula exarida albida 1 cm. lat. sessilibus, primitus clausis, dein disco patellari, orbiculari, demum convexo, tenuissime marginato, 0,2-0,3 mm. diam., succineis, ceraceis, siccis concaviusculis; ascis clavatis, apice rotundatis, 50 \approx 12, 8-sporis, jodo immutatis; sporidiis fusiformibus, obtusis, rectis, medio 1- dein 3-septatis, haud constrictis, hyalinis, 15-20 \approx 5, distichis; paraphysibus filiformibus, 1,5 μ . cr., ramosis, hyalinis; excipulo parenchymatico, ex cellulis parvulis contexto, flavidulo, non gelatinoso.

Hab. ad folium coriaceum, Parà Brasiliæ (BAKER). — Si ascomata ex folii parenchymate exirent, quod incertum est, ad *Fabræam* potius spectare videretur.

5. *Belonidium intermedium* Rehm, Ann. Mycol. VI (1908) p. 315. — 5657

Ascomatibus gregariis, sessilibus, primitus clausis, dein patellaribus, disco orbiculari plano, flavo, tenuiter marginato, excipulo parenchymatico fusco, levibus, 0,2-0,3 mm. siccis, nigrescentibus; ascis

clavatis, versus apicem angustatis, $80 \approx 12$, octosporis, jodo immutatis; sporidiis fusideo-elongatis, utrinque subobtusis, plerumque rectis, 3-septatis, hyalinis, $24-30 \approx 5-5,5$, ad septa paullulum constrictis, distichis; paraphysibus filiformibus 2μ , versus apicem $3,5 \mu$. crassis, hyalinis.

Hab. ad culmos putrescentes Calamagrostidis canadensis, Madison Wisc. Amer. bor. (A. B. Stout). — *Bel. lacustri* et *Bel. subnivali* proximum, sed satis diversum.

6. *Belonidium Glyceriæ* Peck New York St. Mus. Bull. 139 (1909) 5658 p. 19. — Ascomatibus 1-1,5 mm. latis, gregariis, sessilibus, planis v. convexis, extus glabris seu papillatis, flavidis; ascis subclavatis v. subfusiformibus, obtusis, $120-130 \approx 14-18$; sporidiis oblongis v. subcylindraceis, rectis v. leviter curvis, 3-septatis, sæpe 4-nucleatis, confertis v. distichis, $35-40 \approx 4-5$; paraphysibus filiformibus.

Hab. in culmis emortuis *Glyceriæ nervatæ*, Lyndonville Orleans co. Amer. bor.

7. *Belonidium collemoides* Rehm, Ann. Mycol. V (1907) p. 533. — 5659 Ascomatibus sparsis, sessilibus, primitus globoso-clausis, dein patellaribus, disco orbiculari, tenuiter marginato, excipulo glabro, subtus coarctato, vitellinis, ceraceis, 0,5-1,5 mm. diam.; ascis subcylindraceis, apice rotundatis, $50-55 \approx 5-8$, octosporis, jodo immutatis; sporidiis fusioideis, utrinque acutatis, rectis, 2(-4)-cellularibus, hyalinis, $7-9 \approx 2-2,5$, 1-(interdum apice 2-)stichis; paraphysibus filiformibus, septatis, hyalinis, $2,5 \mu$, versus apicem obtusum 4μ . cr.; hypothecio hyalino, crasso.

Hab. in *Jungermanniæ* specie *Acaciam arabicam* incolente, Sao Francisco, Brasiliæ (ULE). — Habitus fere *Collematis*.

8. *Belonidium guttula* Rick, Broteria v. V (1906) p. 36. — 5660 Ascomatibus 300μ . latis, subturbinatis, hyalinis, crystallinis, ceraceis, mollibus, glabris; ascis $35-50 \approx 12$, sessilibus; sporidiis $35-50 \approx 3-5$, multiseptatis, fusiformibus, hyalinis; paraphysibus hyalinis, versus apicem paulatim clavatis, clava in medio angustata.

Hab. in mycelio fusco perisporiaceo, ramos bambusinos occupante, Rio Grande do Sul, Brasiliæ.

9. *Belonidium belonæum* (Nyl.) Sacc. et *Belonidium abscedens* (Nyl.) 5661 Sacc. — Ita scribenda, nec *Bel. beloneum* (Cr.) et *Bel. abscedens* (Cr.) ut in Sylloge VIII, pag. 498, nam ambæ species tribuendæ sunt cl. Nylanderovi qui in Flora 1864 p. 521 primo descripsit deditque dimensiones sporidiorum, nempe: *B. belonæi* sporidia $60-90 \approx 3$; *B. abscedentis* sp. $22-25 \approx 10-11$.

BELONIUM Sacc. — Syll. VIII p. 492, X p. 26, XI p. 417, XIV p. 785, XVI p. 1149, XVIII p. 107.

1. **Belonium valdivianum** Speg., Fungi Chilenses (1910) pag. 127. — 5662
Eubelonium; ascomatibus sparsis v. laxe gregariis, parvis, sessilibus, extus atris, 0,5-2 mm. diam., margine acuto glabro elevatulo, disco planiusculo subcarneo, totis coriaccello-subcarnosulis; ascis clavulatis, sublongiuscule pedicellatis, 80-90 \times 9-10, octosporis; paraphysibus filiformibus sursum vix subincrassatulis obvallatis; sporidiis e naviculari subfusoides, utrinque acutiusculis, mediocribus, hyalinis, primo continuis pluriguttulatis, dein triseptatis, ad septum medium non v. vix constrictulis, 18-20 \times 3-5.

Hab. ad ramos emortuos dejectos Perseæ Lingue prope Ciudad de Valdivia Chile Amer. austr.

2. **Belonium chilense** Speg., Fungi Chilenses (1910) p. 127, cum ic. 5663
— Ascomatibus sparsis v. laxe gregariis, parvis, sessilibus, planiusculis, extus atris. margine elevato repandulo pallidiore pruinuloso, disco e glauco cinereo, totis coriaccello-subcarnosulis, 0,3-1 mm. diam.; ascis subcylindraceis modice cuneato-pedicellatis, 80 \times 8, octosporis, paraphysibus 1,5-2 μ . cr. circumdatis; sporidiis subclavulato-bacillaribus, leniter curvulis, 5-septatis, hyalinis, mediocribus, 30 \times 2-2,5.

Hab. in ramis emortuis Muehlenbeckiæ chilensis, Cerro Caracol de Concepcion Chile Amer. austr.

3. **Belonium spermatoideum** Strasser, Verh. k. k. zool.-bot. Gesellsch. 5664
Wien Bd. LVII (1907) p. 330. — Ascomatibus sparsis v. quandoque subgregariis, primum breviter crasseque stipitatis, globosoclausis v. depressis, subdiscoideis demumque tenuiter depresso marginatis et discum convexum ostendentibus, udis flavido-albis, ad marginem præcipue subpellucidis, glabris, 1-2 mm. diam., tenuiceraceis, siccis flavo-rubidis; ascis subcylindraceis supra leniter expansis, 60-80 \times 5-6, octosporis; sporidiis distichis, obtuse fusoides, hyalinis, sæpe curvis, multis germinantibus, bilocularibus v. nonnullis indistincte quadrilocularibus, bi- v. quadriguttulatis, 12-14 \times 2-3, sæpe sporulis ovoideis spermatoideis 2-3 μ . cr. numerosis immixtis; paraphysibus filiformibus; excipulo prosenchymatico flavido; J-.

Hab. in fragmentis ligneis fagineis, Sonntagberg Austriæ inf. — *B. immarginato* Karst. affine.

4. **Belonium rubrum** Kirschst., Verh. Bot. Ver. Brandenb. XLVIII 5665
(1906) p. 41. — Ascomatibus minutis, 200 μ . c. diam., depressis,

rubro-brunneis, solitariis, molle ceraceis; excipulo prosenchymatico rubro-brunneo, cellulis marginalibus filiformibus prædito; ascis clavatis, basi breviter pedicellatis, $50-70 \approx 8-9$, supra obtuse conoideis, octosporis; sporidiis pluries seriatis, cylindræis, demum multiseptatis, hyalinis, quandoque curvulis, $20-24 \approx 2$; paraphysibus filiformibus, supra 2-3 μ . cr.

Hab. in squamis pineis putrescentibus, in silvis prope Rathanow Germaniæ. — *A. B. pineti* (Batsch.) magnitudine, colore etc. bene distincta species.

5. **Belonium Junci** Jaap, Abh. Bot. Ver. Prov. Brandenb. IL (1907) 5666 p. 11. — Ascomatibus gregariis in maculis pallescentibus sæpe insidentibus, primum globoso-clausis, subimmersis, dein apertis, sessilibus, margine dentatis, disco flavido-albo, extus flavo-brunneis et nigro-brunneo maculatis, subrugulosis, udis pallidioribus, siccis obscure brunneis et margine revoluti præditis, tenue ceraceis, 150-250 μ . diam.; ascis fusoido-clavatis, supra acutato-obtusis incrassatis, $28-36 \approx 4-5$, tetrasporis, J +; sporidiis cylindræo-fusoides v. subglobosis, rotundatis, rectis v. curvulis, hyalinis, unicellularibus et pluriguttulatis, demum bilocularibus, $10-18 \approx 1,5-2$, distichis; paraphysibus filiformibus, hyalinis.

Hab. in foliis vetustis putrescentibus Junci acutiflori pr. Triglitz in Brandenburgia.

6. **Belonium coroniforme** Rehm, Ann. Mycol. V (1907) pag. 534. — 5667 Ascomatibus in apice cæspitis *Orthotrichi* 4-6 arcte confertis, in mycelio crasso hypharum hyalinarum sessilibus, patellaribus, tenuiter marginatis, roseolis, glabris c. 300 μ . alt., 350 μ . lat., excipulo pseudo-prosenchymatico, flavidulo; ascis clavatis, apice rotundatis, $100-120 \approx 10$, octosporis, jodo immutatis; sporidiis elongato-fusiformibus, utrinque subobtusis, rectis, transverse 3-7-9-septatis, ad septa haud constrictis, hyalinis, 2-3-stichis, $25-30 \approx 4,5$; paraphysibus longissimis, filiformibus, septatis, hyalinis, 2 μ . cr.

Hab. in *Orthotricho* prope balneum Gastein Styriæ (Dr. C. LAUBINGER).

7. **Belonium sulphureo-testaceum** v. Höhn., Ann. Myc. v. III (1905) 5668 p. 553, cum icon. — Ascomatibus sparsis, plerumque minutis, 0,5 mm. cr., tenui-carnosulis, primum flavo-sulphureis, viridulo tinctis, depresso discoideis, basi parum angustatis, siccis margine incurvatis, e rubro-brunneis fere lateritiis; hypothecio plectenchymatico fibroso-celluloso; ascis tenuiter tunicatis, fusoido-clavatis, octosporis, $80 \approx 10-11$; paraphysibus filiformibus, 1 μ . cr., apice crassius-

sculis (2 μ .) ibique sæpe curvulis; sporidiis distichis, hyalinis, ellipsoideo-elongatis, utrinque rotundatis, plerumque rectis raro curvulis, plerumque quadrilocularibus, ad septa constrictulis, eguttulatis, 14-20 \times 3-5,5, plerumque 16-18 \times 4-5; J +.

Hab. ad terram prope Allentsteig Austriæ inf.

8. *Belonium albido-roseum* (Rehm) Rehm, in Jaap Zur Fl. v. Glücks- 5669
burg, Schr. Naturw. Ver. f. Schlesw.-Holst. Bd. XIV, Heft 2,
p. 300. — Ita vocanda *Pezizella albido-rosea* Rehm, Disc. p. 682
— Syll. XI, p. 405.

9. *Belonium obtectum* Rehm, (Est. Bot. Ztschr. LVI (1906) p. 346. 5670
(Nomen nudum).

Hab. in *Rhododendro ferrugineo*, Alpeiner-Alpe Stubai
Austria.

LASIOBELONIUM Sacc. — Syll. VIII p. 502, XIV p. 789, XVIII
p. 106.

1. *Lasiobelonium lachnoides* Rehm, Contr. mycol. Hung. (Növ. Közl. 5671
1905 p. 6). — Ascomatibus gregariis, sessilibus, primitus globoso-
clausis, brevissime cyathoideo-stipitatis, dein disco urceolato, de-
num irregulariter explanato, albidulo, excipulo imprimis versus
marginem pilis creberrimis rectis, obtusis, septatis, scabriusculis,
dilute flavidulis, ad apicem fere hyalinis, 100-150 \times 4, adpressis
obsesso, ceterum pseudoprosenchymatico, 0,5-1,5 mm. lat., 1 mm.
alt., ceraceis; ascis cylindraceutis ad apicem rotundatis, 90-100 \times 7-8,
octosporis; sporidiis cylindraceutis, utrinque subobtusis, rarissime in-
ferius acutatis, rectis, 3-septatis, hyalinis, 18-24 \times 3, distichis; pa-
pophysibus filiformibus, sæpe versus apicem acutatis, hyalinis, se-
ptatis, 2 μ . cr.; poro ascorum jodii ope cæruleo-tincto.

Hab. in ligno decorticato Carpini Betuli et Alni glutinosa, Berencsfalu, prope Selmezbánya Hungariæ (KMET). —
Lachnellæ extus similis, sporidiis plane divergens species, proxima
Lasiobelonio subflavido Ellis et Ev., pilis autem alienis diversa,
nec non paraphysibus ad formam *Lachni* plus minusve lanceolato-
acutatis.

2. *Lasiobelonium globulare* v. Höhn., Stzb. k. Ak. d. Wiss. Wien 5672
CXVIII, Abt. I (1909) pag. 387. — Ascomatibus gregariis, basi
angustata insidentibus, primum globoso-clausis, dein supra rotun-
dato-apertis, subscutellatis, disco parvo ochraceo-aurantiaco, 0,5
mm. circ. diam. depresso, extus et ad marginem revolutum albis,
dense albo-pilosis; ascis sessilibus, clavatis, supra rotundato-obtu-

sis et vix conoideis, octosporis, $100-110 \approx 13-14$; paraphysibus septatis, filiformibus, acutis, 2μ . cr.; sporidiis hyalinis, distichis v. tristichis, fusoideis, rectis, utrinque acutis, $5-8$ -septatis, $40-60 \approx 5,5-5$. J +.

Hab. in vaginis putrescentibus *Bambusæ* in horto bot. Buitenzorg Java.

3. *Lasiobelonium aquilinellum* v. Höhnelt, *Ergebn. Bot. Exp. Südbras.* 5673 1901, *Denk. k. Ak. d. Wiss. Wien Bd. LXXXIII* (1907) Extr. p. 32. — Ascomatibus gregariis, sessilibus, $200-350 \mu$. diam., obconoideis, pilosulis, basi in pedicellum $100-120 \mu$. long., $65-70 \mu$. cr. attenuatis, pallide griseo-brunneolis v. sordide flavidis, disco pallido; contextu prosenchymatico; ascis cylindraceo-clavatis supra conoideo-acutatis, obtusiusculis, $140-150 \approx 16-18$, basi in pedicellum tenuem 40μ . long. angustatis, octosporis; sporidiis parallele dispositis, hyalinis, quadrilocularibus, cylindraceis, utrinque attenuato-obtusis, $52-56 \approx 2-3,5$; paraphysibus tenuiter filiformibus, supra non incrassatis. J +.

Hab. in pagina inf. frondium brunnescentium *Pteridii aquilini*, M. Jaraguá prope Taipas Sao Paulo Brasilia.

STROSSMAYERA Schulz. *Æst. bot. Zeitschr.* (1881) p. 314 (Etym. in honorem Episcopi J. G. STROSSMAYER, Botanices mæcenatis). — Ascomata sessilia, primo globosa, denique cupuliformia, mollia, glabra, in mycelio *Helminthosporii* insidentia. Asci clavati, substipitati, octospori. Sporidia oblongo-ellipsoidea, 3-septata, hyalina, basi appendicula crassiuscula, teretiuscula, equidem septata demum secedente aucta. — Sporidiorum appendiculâ peculiari mox dignoscendum genus.

1. *Strossmayera Rackii* Schulz., l. c. cum fig. spor. — Ascomatibus 5674 minutissimis $150-300 \mu$. diam., albis, subregularibus, marginatis, cellulis parenchymatis hyalinis ex hyphis tenuissimis ascendentibus contextis; ascis $92 \approx 11-13$; paraphysibus paucis interdum subcapitellatis; sporidiis di-tristichis, $6 \approx 2,5$, triseptatis, non constrictis, oblongo-ellipsoideis utrinque rotundatis, hyalinis, appendicula cylindracea $11 \approx 2$, apice rotundata, leniter curva, 3-septata, tarde secedente.

Hab. in mycelio *Helminthosporii gongrotrichi* ad ramulos *Fraxini* in silva Vidor pr. Vinkovce Hungariæ.

TRICHOBELONIUM Sacc. — Syll. VIII p. 495, XVI p. 747, XVIII p. 99.

1. *Trichobelonium virgineum* Rick, Broteria V (1906) p. 224. — Su- 5675
biculo albo arachnoideo; ascomatibus substipitatis, 1-2 mm. latis, extus intusque hyalino-albis, dein disco flavescente, carnosus; extus pilis vertice globosis, septatis, albis, 0,1 mm. longis, glandulosis, rigidis, dense vestitis; ascis clavatis, circ. 150 \times 12, breviter pedicellatis, apice angustatis; sporidiis filiformibus, 100 \times 2,5, octonis, hyalinis, multiseptatis; paraphysibus filiformibus, ramosis.

Hab. in Palmis putridis in Brasilia.

2. *Trichobelonium distinguendum* Syd., Myc. germ. fasc. XIV-XV n. 704 5676
(1908) et Ann. Mycol. VI (1908) p. 479. — Ascomatibus gregariis, mycelio ex hyphis brunneolis septatis ca. 5 μ . crassis composito insidentibus, tenuiter marginatis, disco plano albido-griseo vel leniter albido-cærulescente extus subhyalinis, levibus, $\frac{1}{2}$ -2 mm. latis, ceraceis, in sicco vix vel parum involutis et sordide albidis v. albo-griseis; ascis cylindræco-clavatis, apice obtuse attenuatis, 60-80 \times 6-8, octosporis; sporidiis distichis, subcylindræcis, obtusis, rectis vel lenissime curvulis, primo continuis et pluribus guttulis oleosis repletis, dein medio 1-septatis (an tandem pluriseptatis?), hyalinis, 18-26 \times 2 $\frac{1}{2}$ -3 $\frac{1}{2}$; paraphysibus filiformibus, hyalinis, ca. 1 $\frac{1}{2}$ μ . crassis, ascos æquantibus vel parum superantibus.

Hab. in culmis emortuis Phagmitis communis, Schmöckwitz pr. Berolinum Marchiæ Brandenb. (SYDOW). — Inter *Tapesiam hydrophilam* et *Trichobelonium retincolam* species fere media.

3. *Trichobelonium albo-granulatum* Rehm, Ann. Mycol. VII (1909) 5677
p. 540. — Ascomatibus in epiphyllis late albide granulato, mycelio hypharum hyalinarum arcte congregatarum, crystallæ irregularia plurima obtegentium obducto sessilibus, primitus globosoclausis, dein orbiculariter applanatis, margine tenuissimo mycelii cinctis, disco hyalino, subflavidulo, excipulo parenchymatico, hyalino, 0,5-1,5 mm. diam.; ascis clavatis, crassis, apice rotundatis, 80-90 \times 20, octosporis; sporidiis ellipsoideis, utrinque obtusis, rectis v. subcurvatis, transverse 5-7-septatis, cellula tertia latiore, 25 \times 7-8 distichis; paraphysibus filiformibus, 1 μ . cr. hyalinis conglutinatis.

Hab. ad folium coriaceum, Sao Leopoldo, Rio Grande do Sul Brasilæ (THEISSEN S. J.). — Magnitudine ascomatum et conformatione sporidiorum valde distincta species.

VELUTARIA Fuck. — Syll. VIII p. 488, XIV p. 785.

1. *Velutaria Polytrichi* Rehm, Hedwigia XXVIII (1889) p. 348. — 5678

Ascomatibus sessilibus, primitus globosis, dein urceolatis, crasse marginatis, demum explanatis et irregulariter tenuiter marginatis, fusco-nigris, disco pallidiore, crasse parenchymatice flavo-contextis, glabris, c. 0,2-0,4 mm. diam.; ascis clavatis, apice subrotundatis et incrassatis, $36 \times 6-8$, ? octosporis; sporidiis fusiformi-clavatis, obtusis, rectis, 1-cellularibus, hyalinis, $7-8 \times 3$, distichis; paraphysibus filiformibus, teneris, superne dichotomis, apice rotundatis, dilatatis 5 μ . cr., flavis. J —.

Hab. in pedunculis fructiferis emortuis *Polytrichi juniperini*, prope Radnitz Moraviæ (v. NIESSL). — Ob immaturitatem incertum est an vere ad *Velutariam* pertineat.

Sect. 5. Hyalodictyæ.

DICTYOMOLLISIA Rehm, Ann. Mycol. VII (1909) p. 540 (Etym. *dictyon* rete et *Mollisia*). — A gen. *Mollisia* ascis oblongo-globosis, sporidiis transverse et perpendiculariter septatis, inde parenchymaticis diversum genus. — Primum genus dictyosporum inter *Pezizaceas*!

1. *Dictyomollisia albido-granulata* Rehm, loc. cit. — Ascomatibus hy- 5679
pophyllis, in maculis vix flavidulis, haud marginatis plerumque solitariis, rarius binis sessilibus, primitus globoso-clausis, dein urceolatis, demum disco orbiculari dilute aureo, crasse granulato-marginato, tandem interdum circulariter convolutis, extus albis, granulatis, excipulo crasso parenchymatico e cellulis sexangularibus hyalinis, 20 μ . latis formato, 0,5-1,5 mm. diam., siccis involutis; ascis oblongo-globosis, haud stipitatis, $45-48 \times 25-30$, octosporis, jodo immutatis; sporidiis ovoideo-oblongatis, utrinque rotundatis, transverse 5-7-, perpendiculariter 1-2-septatis, hyalinis, medio subconstrictis, $20-22 \times 8-10$; paraphysibus tenerrimis, ascos ambientibus.

Hab. ad folia Lauracæ, Sao Leopoldo, Rio Grande do Sul Brasiliæ (THEISSEN S. J.).

Sect. 6. *Scolecosporæ*.

BELONIOPSIS Sacc. — Syll. VIII p. 351, XVI p. 752.

1. *Beloniopsis tropicalis* Rick, Broteria V (1906) p. 36. — Ascoma- 5680
tibus sessilibus, 2 mm. latis, applanatis, ceraceis, extus glabris, succineis, centro obscurioribus; ascis 25×5 , octosporis; sporidiis filiformibus, longitudine asci, tenuissimis, hyalinis; paraphysibus filiformibus, apice sphaericis, hyalinis, epithecium nullum formantibus.

Hab. in ramo deciduo Pini, Rio Grande do Sul Brasiliæ.

2. *Beloniopsis pamparum* Speg., Myc. Arg. IV, in An. Mus. Buenos 5681
Aires (1909) p. 450, fig. 38. — Minuta, sparsa, atra, glabra, rigidula, patellata, 120-200 μ . diam. subtus late adnata convexula, supra concaviuscula ambitu repandula, sed integra; ascis clavulatis, densiuscule furcato-paraphysatis, apice late rotundatis, $45-60 \times 10-15$, breviter crasseque pedicellatis, octosporis, jodo immutatis; sporidiis fasciculatis, rectiusculis, fuscoideis, utrinque acutiusculis, $30-35 \times 3-4$, sæpius 5-7-pseudo-septatis, hyalinis.

Hab. ad culmos aridos Aristidæ sp., Juarez Celman pr. Cordoba, Argentina.

GORGONICEPS Karst. — Syll. VIII p. 504, X p. 30, XI p. 419, XVI p. 753, XVIII p. 112.

1. *Gorgoniceps Baccharidis* Rehm, Ascom. Exsicc. fasc. 43, n. 1801 5682
et Ann. Mycol. VII (1909) p. 134. — Ascomatibus dispersis, sessilibus, primitus globoso-clausis dein patellaribus, disco orbiculari, rubidulo, tenuissime obscurius marginato, extus fuscidulis, glabris, excipulo tenuiter parenchymatice contexto, 0,15-0,2 mm. diam., siccis globoso-contractis; ascis cylindraceis, apice rotundatis, $80-90 \times 9$, 8-sporis; sporidiis filiformibus, rectis, pluri-septatis, hyalinis, $70 \times 1,5$, parallele positis; paraphysibus longis, filiformibus, hyalinis, 1,5 μ . cr.

Hab. ad folia Baccharidis genistelloidis, Sao Leopoldo, Rio Grande do Sul Brasilia (THEISSEN).

2. *Gorgoniceps tremellina* (Bon.) Sacc. et Trav. — Syll. XIX, p. 793 5683
— *Leptosporium* Bonorden in Bot. Zeit. 1857, p. 211, t. IV, f. C.
— Ascomatibus laxè gregariis, sessilibus, superficialibus, primo clausis, subglobosis, mox lenticularibus discoideo-apertis, 2 mm. latis, excipulo fusco-atro; disco demum convexo immarginato, gela-

tinoso, flavido; ascis tereti-clavatis, apice rotundatis, deorsum sensim tenuatis; paraphysibus filiformi-clavatis, dichotomis asco brevioribus obvallatis; sporidiis filiformibus, sæpe curvulis, utrinque obtusulis, hyalinis, continuis, asco brevioribus.

Hab. in ramis dejectis Salicis sp. in Germania.

3. *Gorgoniceps candida* Speg., Myc. Arg. IV, in An. Mus. Buenos Aires (1909) pag. 451. — Pusilla, laxe gregaria, alba, subsessilis, turbinata, carnosulo-ceracella, subsolitaria v. 2-5-gregaria, serius subpatellaris, 150-300 μ . diam., glaberrima, margine integro; ascis subfusoides, filiformi-paraphysatis, utrinque attenuatis, brevissime noduloso-suffultis, $70 \approx 7$, octosporis; sporidiis filiformibus multiguttulatis, fasciculatis, utrinque obtusulis, 50-60 $\approx 1,5$ rectis v. vix flexuosis, hyalinis.

Hab. ad folia basalia Tillandsiæ Duratii arida in horto Auctoris, La Plata Argentina.

4. *Gorgoniceps phragmospora* Spegazz., Myc. Arg. IV, in An. Mus. Buenos Aires (1909) p. 451. — Parva, sessilis, ceraceo-ochroleuca, disco pruinula e roseo cinerescente tecta, seriata, sæpe bi-ternato-confluens, 1-3 mm. long., 1-1,5 mm. lat., coriacea, supra demum convexula, margine integro; ascis linearibus apice rotundatis, breviter cuneato-pedicellatis, 180-200 ≈ 8 , octosporis; paraphysibus filiformibus, densis, apice grumoso-coalescentibus; sporidiis asci longitudine, articulis utrinque truncato-rotundatis, 2,5-3 μ . longis, hyalinis.

Hab. ad palos diu intemperiei expositos, Parque de La Plata Argentina. — Habitus nonnihil licheninus v. corticioideus.

5. *Gorgoniceps jowensis* Rehm, Ann. Mycol. IV (1906) p. 338. — Ascomatibus dispersis, sessilibus, subglobosis, in stipitem brevissimum crassum elongatis, demum disco patellari, marginato, mox convexulo et emarginato, albescente, extus glabris, cæruleo-viridulis, 0,2-0,5 mm. diam. et alt., siccis disco suburceolato, dilute fuscidulo, excipulo ad basim fusco ceterum hyalino, prosenchymatico; ascis clavatis, apice rotundatis, 80-100 $\approx 10-12$, octosporis, jodo immutatis; sporidiis subcylindraceis, interdum subcurvatis, plerumque rectis, utrinque rotundatis, transverse 7-septatis, haud constrictis, hyalinis, 30-33 $\approx 3-4$, distichis; paraphysibus filiformibus, 2 μ ., versus apicem 2,5-3 μ . cr. et subcurvatis, hyalinis.

Hab. ad lignum vetustum, Mt. Pleasant Iowa Americæ bor. (SEEVER). — Affinis *Gorgonicipiti pumilioni*.

ERINELLA Sacc. Syll. VIII p. 507, X p. 30, XI p. 419, XIV p. 789, XVI p. 753, XVIII p. 113.

1. *Erinella æruginosa* P. Henn., Hedwigia XLV (1905) pag. 30. — 5687

Mycelio æruginoso; ascomatibus sparsis v. aggregatis, stipitatis, primo subglobose-clausis, dein cupulatis, ceraceis, extus dense æruginoso-tomentosis, pilis c. 100-200 \times 3-3,5, æruginosis. septatis, disco pallido levi, margine albido fimbriato, c. 1-2 mm. diam.; ascis clavatis, apice obtuse rotundatis, 8-sporis, 80-100 \times 9-11, paraphysibus filiformibus, 2-2,5 μ . cr., apice paullo incrassatis; sporidiis subdistichis v. subtristichis, longe fusoides, utrinque acutiusculis, 3-septatis, dein constrictis, hyalino-cyanescentibus, 30-45 \times 3,5-4.

Hab. in ligno putri *Quercus pedunculatæ* in silvis prope Michailowskoe Rossiae (Mossoloff).

2. *Erinella africana* Syd., Deutsche Zentral-Afrika Exped. (1907-1908) 5688

II Bd. p. 100. — Ascomatibus sparsis, distincte stipitatis, cupuliformibus, extus albo-flavidis, tenuiter pruinuloso-tomentosis sed vix pilosis, disco carneolo, margine crassiusculo, leniter inflexo, $\frac{3}{4}$ -1 $\frac{1}{3}$ mm. diam.; stipite concolore $\frac{1}{2}$ -1 mm. longo; ascis cylindraceis, apice obtusis, breviter stipitatis, 70-115 \times 8-11, octosporis; sporidiis bacillari-fusoides, continuis, hyalinis, utrinque lenissime attenuatis, 32-42 \times 3, paraphysibus numerosis, simplicibus, linearibus, rectis, ascos parum superantibus, c. 3-3,5 μ . cr.

Hab. ad ramos putres, Bukoba in Africa tropicali.

3. *Erinella difficillima* (v. Höhn.) Sacc. et Trott., *Dasyscyphella diffi-* 5689

cillima v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I (1909) p. 393. — Ascomatibus solitariis v. parce cæspitosis, vix pedicellatis, basi angustatissima insidentibus, 0,5-1 mm. sessilibus, depresso-patellaribus, margine leniter involuto, extus et margine crebre albo-pilosis; contextu distincte fibroso; disco pallide flavo-aurantiaco; ascis cylindraceo-clavatis, supra obtuse conoideis, basi sensim in pedicellum 20-40 μ . longum tenuatis, 130-140 \times 12, octosporis; paraphysibus tenuissimis, filiformibus, septatis, apice acutis, 2-2,5 μ . cr.; sporidiis pluries seriatis, rectis vel curvulis, cylindraceo-filiformibus, basi crassioribus, utrinque obtusulis, 7-13-septatis, 60-115 \times 2,5-3. J +.

Hab. in vaginis putrescentibus *Bambusæ*, in horto bot. Buitenzorg in ins. Java. — *Er. simillimæ* (B. et Br.), *Er. calosporæ* Pat. et Gaill., *Er. tjibodensi* P. Henn., *Er. disciformi* P. Henn. affinis.

4. *Erinella javensis* v. Höhn., Stzb. k. Ak. d. Wiss. Wien, CXVIII 5690

Abt. I (1909) p. 394. — Ascomatibus gregariis, stipitatis e globoso subpatellariter effusis, 1-1,5 mm. latis, extus albis, disco pallide vitellino; stipite 0,5 mm. long., 180-200 μ . cr., alto, pilosulo, intus cum excipulo fibroso, margine ascomatis asperulo, subcurvulo; hypothecio laxo plectenchymatico ex hyphis 2-3 μ . cr. formato; ascis cylindraceo-clavatis, supra obtusulis, 64 \times 5,5, octosporis; paraphysibus filiformi-lanceolatis, supra acutiusculis, ascos parum superantibus; sporidiis polystichis, plerumque rectis, acicularibus, utrinque acutiusculis, contentu nitido homogeneo, apparenter unilocularibus, sed vero 10-15 septis tenuibus transverse divis, 16-23 \times 1,6-2. J +.

Hab. in ramulis siccis in Horto bot. Buitenzorg in ins. Java.

5. *Erinella subcervina* Bres., in Rick Fungi austro-amer. III, n. IV, 5691 n. 51, Ann. Myc. v. IV (1906) pag. 309. — *Lachno avellaneo-melleo* Starb. affinis sed sporidiis 3-septatis diversa.

Hab. in Brasilia, America austr.

Fam. 5. Ascobolaceæ Boud.

Sect. 1. Hyalosporæ.

ASCOPHANUS Boud. — Syll. VIII p. 528, X p. 32, XI p. 421, XIV p. 793, XVI p. 758, XVIII p. 116.

1. *Ascophanus argentinensis* Speg., Myc. Arg. IV, in An. Mus Buenos Aires (1909) p. 452. — Ascomatibus dense gregariis superficialibus primo obconico-turbinatis, dein subcollapsis atque hemisphaericis, aurantiis, 2-3 mm. diam., extus glabris, contextu grosse parenchymatico-vesiculoso; ascis apice rotundatis cylindraceis, basi abrupte cuneatis, breviter pedicellatis, 160-200 \times 25, octosporis, jodo leviter tinctis; paraphysibus filiformi-clavulatis 5-10 μ . cr., aurantiis; sporidiis mono-distichis tunica mucosa crasse obvolutis, utrinque obtuse rotundatis, 25-28 \times 14-18, hyalinis, sæpius 1-nucleatis.

Hab. in stercore felino putri in domo auctoris, La Plata Argentina. — Ad Pezizeas notis plurimis nutat.

2. *Ascophanus pseudogranuliformis* Speg., Myc. Arg. in An. Mus. Buenos Aires (1909) p. 453. — Ascomatibus sparsis, turbinatis, sessilibus, citrinis, glabris, minutis, serius fere cylindraceis, 1-1,5 mm. alt. et lat., supra truncatis, margine integris; ascis cylindra-

ceis longissime pedicellatis, aparaphysatis, apice subtruncatis, jodo immutatis, $75-85 \approx 10-12$ p. sp.; stipite $80 \approx 5$; sporidiis cylindraceo-ellipsoideis, hyalinis, octonis, utrinque obtuse rotundatis, $13-15 \approx 7-7,5$, sæpe centro 1-guttatis.

Hab. in fimo vaccino putri, Cerro San Bernardo, Salta, Argentina. — Imprimis ascis aparaphysatis longissime pedicellatis dignoscendus.

3. **Ascophanus Coemansii** Boud. Mém. Ascob. p. 54, tab. X, 30, in 5694 Ann. Sc. Nat. 5 ser. Bot. t. X, 1869, *Ascobolus granuliformis* Coem., Kickx p. p. — Minutus 0,5-1 mm. latus, sparsus v. aggregatus, aurantiaco-olivascens, convexus, glaber, paraphysibus capitato-clavatis, clava luteo-virente; receptaculo levi, disco convexo minute papillato, aurantiaco-olivascens aut fulvescente; paraphysibus septatis, simplicibus aut divisis, ad apicem capitatis, luteo-virentibus, ad basim hyalinis; ascis minutis, subamplis, clavatis, attenuatis, hyalinis; sporidiis oblongo-ovoideis, subfusiformibus, minutis, hyalinis, maturis liberis, junioribus gelatina aggregatis.

Hab. ad stereus vaccinum vetustum, spersus v. aggregatus, circa Parisios et Montmorency Galliae et in Belgio. — Ab *Asc. minutissimo* statura et colore diversus, ab *A. granulato* colore, forma et magnitudine ascorum sporidiorumque et paraphysibus apice magis inflatis coloratis.

4. **Ascophanus lacteus** (Cke. et Phill.) Sacc. — Syll. VII, p. 528 — 5695 var. **macrosporus** Heimerl, Niederösterr. Ascob. p. 25, t. I, f. 10 extr. — Ascis $88-120 \approx 21$, clavatis, paraphysibus distincte septatis cylindraceis obvallatis; sporidiis subdistichis, $12-13,5 \approx 8-8,5$.

Hab. frequenter in fimo equino, Schönbrunn et in stercore putrido cervino, Pressbaum Austriae. — var. **micosporus** Heimerl, l. c. p. 25, t. I, f. 9. — Ascis $73-80 \approx 10-14$, paraphysibus filiformibus obsolete septatis obvallatis; sporidiis submonostichis, $8,5 \approx 9,6$. — Cum præcedente.

5. **Ascophanus belgicus** B. R. S. in Saccardo, Not. Myc. VI, Ann. 5696 Myc. v. III (1905) p. 507. — Ascomatibus sessilibus, glabris, 1-2 mm. diam., sparsis v. subconfluentibus, hemisphaericis, mox disco planiusculo, papillato, initio fulvis, dein purpurascentibus, denique atro-brunneis, margine reflexo undulato; ascis cylindraceis, apice obtusis, breve noduloso-stipitatis, $75-90 \approx 10$, stipite $14-16 \mu$. long.; paraphysibus copiosis, asco longioribus, 2-3-furcatis clavula interdum prolifera hyalina terminatis; sporidiis monostichis, ellipsoideis, continuis, crasse 1-guttatis, hyalinis, $10-12 \approx 8-10$.

Hab. in fimo Cuniculorum, La Panne, Furnes Belgii.

6. *Ascophanus chartarum* Kirschst., Verh. Bot. Ver. Brandenburg, 5697
XLVIII (1906) p. 46. — Ascomatibus gregariis, sessilibus, flavo-succineis v. flavido-rubris usque ad 0,5 mm. diam.; ascis late clavatis in pedicellum tenuatis, supra rotundatis, 36-40 \times 10, octosporis; sporidiis suboblique distichis, hyalinis, irregulariter ovoideis, 6-8 \times 3; paraphysibus filiformibus, hyalinis, supra usque 2 μ . cr.

Hab. in charta putrida, prope Rathenow Germaniæ.

7. *Ascophanus magnificus* Kirschst., Verh. Bot. Ver. Brandenburg, 5698
XLVIII (1906) p. 46. — Ascomatibus sparsis, insidentibus, primum globosis, dein depresso lenticularibus, pallidis fere hyalinis, demum roseis, molle ceraceis, ob ascos prominentibus punctulatis, 0,5-2 mm. diam.; excipulo parenchymatico, flavido v. roseo; ascis clavatis, vix pedicellatis, crasse tunicatis, apice depressis crasseque tunicatis, operculatis, octosporis, 275-300 \times 35-40; sporidiis monostichis v. supra distichis, hyalinis, unilocularibus, eguttulatis, ellipsoideis, bitunicatis, tunica externa asperulata, 20-25 \times 13-16; paraphysibus infra roseis, septatis, 6 μ . circ. cr., supra clavatis hyalinis, guttulado-farctis, 10-12 μ . cr.

Hab. ad truncum pineum putrem prope Gross-Behnitz Germaniæ.

CUBONIA Sacc. — Syll. VIII p. 527, XIV p. 792.

1. *Cubonia niepolomicensis* Rouppert, Bull. Ac. Sc. Cracovie (1908) 5699
p. 650. — Fungillus argenteo-albus, 0,5-1 mm. latus, excipulo pseudoparenchymatico; ascis cylindraceis, octosporis, 140-180 \times 24, paraphysibus filiformibus longioribus; sporidiis perfecte sphaericis, 12-15 μ . diam. æquantibus, hyalinis, dein paululo lilacinis, verrucosis.

Hab. in fimo canino, in silva Puszcza Niepolomska dicta, in Polonia.

EXOGONE P. Henn., Verh. Bot. Ver. Prov. Brandenburg L (1908) p. 130 (Etym. *exo* extus et *goneia* generatio). — Excipulum nulum; ascomata depresso globosa, libera, supra hypothecium verruciforme pseudoparenchymaticum efformata; asci clavati, octospori, paraphysibus ascos superantibus; sporidia ellipsoidea v. subglobosa, hyalina, tunica verrucoso-punctata; mycelium saprophyticum repens. — Genus incertæ sedis.

1. *Exogone Keiseriana* P. Henn. l. c. p. 130, cum icon. — Ascoma- 5700

tibus solitariis v. gregariis, subglobosis, albidis, basi appplanatis, flavidis, 1-2 mm. diam., mycelio repente, septato, ramoso; ascis clavatis, supra rotundatis v. appplanatis, octosporis, 160-200 \approx 25-33; paraphysibus sæpe ramoso-septatis, supra subclavatis et 10-12 μ . incrassatis; sporidiis supra plerumque distichis, ellipsoideis dein verisimiliter subglobosis, primum levibus dein punctato-verruculosis hyalinis v. tunica flavidula præditis, 15-22 \times 15-18.

Hab. in foliis pineis et in caulibus Brassicæ oleraceæ, Schöneberg Berolini Germaniæ.

Sect. 1. Phæosporæ.

ASCOBOLUS Pers. — Syll. VIII p. 514, X p. 31, XI p. 420, XIV p. 793, XVI p. 760 et 1149, XVIII p. 118.

1. *Ascobolus Michaudi* Boud., Icon. Mycol. t. II, pl. 409 (1906) Hist. 5701 et Classif. Discomyc. Europe (1907) p. 71. — Minutus 1-2 mm. latus, turbinatus aut breviter stipitatus, luteus, extus glaber hymenio ascis nigro-punctatus; ascis clavatis, octosporis, 150-200 \approx 20-25, paraphysibus linearibus, ad apicem vix incrassatis, septatis, 5-7 μ . crassis et ut ascis in gelatina lutea immersis; sporidiis ellipsoideis, striatis, junioribus albis, maturis violaceis et irregulariter in ascis maturascentibus, 23-25 \times 13-14.

Hab. in fimo equino in départ. Rhône, Gallia. — Ab *Asc. marginato* differt statura minori, colore semper flavo, ascomate extus glabro etc.

2. *Ascobolus immersus* Pers. — Syll. VIII, p. 523 — var. *andinus* 5702 Speg., Myc. Arg. IV in Ann. Mus. Buenos Aires (1909) p. 452. — Ascomatibus hemisphæricis, parvis, 1-1,2 mm. diam., supra truncatis, viridi-flavescentibus glaberrimis; ascis tetrasporis 200 \times 60, paraphysibus non clavulatis obvallatis, jodo tinctis; sporidiis 58-60 \times 38-40 primo hyalinis demum opace fuliginis, semper nudis.

Hab. in fimo vaccino prope Mendoza, Argentina.

3. *Ascobolus behnitzensis* Kirchst., Verh. Bot. Ver. Brandenburg, 5703 XLVIII (1906) p. 47. — Ascomatibus solitariis v. paucis aggregatis, primum globoso-clausis, dein apertis et acute marginatis, demum patentibus, extus brunneo-olivaceis, furfuraceo-striatis; disco primum concolori, demum obscure v. nigro-brunneo, usque 1 cm. diam.; ascis cylindræis, dein clavatis, pedicellatis, supra rotundato-operculatis, 160-200 \approx 14-20, octosporis; sporidiis monostichis

v. irregulariter distichis, primum pallide dein obscure brunneis
v. pallide dein obscure violaceis, ovoideis, reticulato-striatis, 15-
26 \times 9-16; paraphysibus filiformibus, griseo-olivaceis, conglutinatis.

Hab. in argillosis prope Gross-Behnitz Germaniæ. — Inter *A. carbonarium* Karst. et *A. atro-fuscum* Ph. et Pl. medius.

4. *Ascobolus striato-punctatus* Boud., Icon. Mycol. t. II, pl. 13 (1906) 5704
Hist. et Classif. Discomyc. Europe (1907) pag. 72. — Pro genere
medius, 2-5 mm. latus, luteo-virens dein subolivaceus, extus oli-
vaceo-furfuraceus, ascomatibus hemisphæricis dein convexis, disco
nigro-punctato; ascis majoribus, clavatis, 280-320 \times 28-30, para-
physibus tenuibus ad apicem clavulatis 7-12 μ . cr. terminatis et
ut ascis in gelatina lutea immersis; sporidiis majoribus, fusiformi-
bus, violaceis, 30-35 \times 12-13, striis simplicibus aut divisis longitu-
dinalibus et crebre punctatis ornatis.

Hab. ad terram argillaceam in silvis Montmorency, Gallia. —
Ascob. *viridi* affinis sed differt sporidiis striis tenuioribus magis
numerosis transverse punctulatis, præditis.

5. *Ascobolus mirabilis* Dangeard in Botaniste, X (1907) pag. 321, 5705
tab. 67-70. — Mycelio araneoso; ascomatibus immaturis sphaeroi-
deis v. ovoideis initio clausis, supra glabrescentibus; ascis spori-
diisque nondum evolutis visis; quoad evolutionem ascogonii cfr.
Dang. l. c.

Hab. cultus in Agar in laboratorio botanico Poitiers. — Ipse
cl. auctor fatetur speciem genuinam non condidisse, sed tantum
dedisse nomen ad interim ut sua expositio bio-morphologica sub
nomine quodam militaret.

RUHLANDIELLA P. Henn. — Syll. XVII, p. 241. — Ex errore ca-
lami in Syll. l. c. inter Gasteromycetes locata, transferri debet ad
Discomycetes prope *Gymnodiscum* — Syll. VIII, p. 545.

Fam. 6. Dermateaceæ Fr.

Sect. 1. Hyalosporæ.

MIDOTIS Fr. — Syll. VIII p. 547 pp.

1. *Midotis Heinricherii* Bres., Ann. Mycol. V (1907) p. 242. — Ve- 5706
geta aurantiaca, carnosolenta; stipite communi crasso, rugoso, 2-3

cm. longo crassoque, sursum varie ramoso; ramis compressis, villosis, in cupulas auriformes vel spathulatas, profunde lobato-incisas, abeuntibus; cupulis extus villosis, marginibus reflexis; hymenio levi; ascis clavatis, basi tortuoso-stipitatis, jodo haud tinctis, 100-110 \times 6-7; paraphysibus ramosis, 2 μ . crassis, apice incrassato, sæpe curvato, 3 μ . crasso; sporidiis ellipticis, hyalinis, 6-7 \times 3-3 $\frac{1}{2}$; contextu excipuli parenchymatico; pilis septatis, 100-250 μ . longis, basi 8-9 μ . crassis.

Hab. ad ligna in insula Java (HEINRICHER). — Totus fungus 7-8 cm. altus, 5-6 cm. latus habitu fere *Sparassis crispæ*; in vegeto aurantiacus, in alcohole luride luteus, trunco fuscidulo.

2. *Midotis americana* (Thaxt.) Sacc. et Trav. — Syll. XX, p. 92 — 5707

Wynnea americana Thaxt. Bot. Gaz. (1905) XXXIX pag. 246, tab. IV-V. — Sclerotio molli, subgelatinoso, in sicco coriaceo, irregulariter lobato, brunneo, circiter 50 \times 40 mm.; ascomatibus paucis v. usque ad 25, typice simplicibus raro multiplicibus, erectis, elongatis subauriculatis, magnitudine variabilibus circ. 130 \times 60 mm., margine subinvoluta, extus nigro-brunneis, minute verruculosus, margine subpilosis; disco æquali, rubro-purpureo v. brunneo; ascis elongatis 500-540 \times 18, octosporis; paraphysibus septatis simplicibus v. irregulariter ramosis, clavatis, apice brunneolis; sporidiis subcymbiformibus, 32-40 \times 15-16, utrinque apiculatis v. papillatis, granuloso-farctis et grosse subguttulatis.

Hab. ad terram in silvis, Burbank, East Tennessee et Craberry North Carolina America bor.

DERMATEA Fr. — Syll. VIII p. 550, XI p. 422, XIV p. 794, XVI p. 762, XVIII p. 122.

1. *Dermatea olivacea* Kirschst. Verh. Bot. Ver. Brandenb. XLVIII 5708

(1906) p. 40. — Ascomatibus e cortice cæspitose erumpentibus in stromate indistincto brunneolo insidentibus, primum clausis, globosis, dein hemisphærice apertis et discum obscure olivaceum ostendentibus, sessilibus, extus brunneo- v. viridi-pruinosis, firme ceraceis, 0,5 mm. circ. diam.; excipulo prosenchymatico, olivaceo; ascis clavatis, breviter pedicellatis, supra rotundatis v. obtuse conoideis incrassatulis, 90-100 \times 18-20, octosporis; sporidiis laxè distichis, oblongis, pluriguttulatis, basi acutatis, hyalinis, quadrilocularibus, 18-20 \times 8-9; paraphysibus ascos longitudine æquantibus, hyalinis v. chlorinis, filiformibus, ramosis, supra rotundatis, quandoque etiam clavatis.

Hab. in ramis dejectis Pruni domesticæ, prope Gross-Behnitz Germaniæ. — Gen. *Peziculæ* Tul. forte adscribenda.

2. *Dermatea olivascens* Rehm, Ascomycetes exs. (1907) n. 1686, 5709
Ann. Mycol. V (1907) p. 80. — Ascomatibus dispersis, primitus immersis, per epidermidem prorumpentibus, plerumque solitariis, subglobosis, mox patellaribus marginatisque, demum disco convexulo, olivaceo-fusco, pulverulento, 0,5-1,5 mm. diam. in stipitem brevissimum elongatis, excipulo fuscidulo parenchymatice contexto, ceraceis; ascis clavatis, imprimis ad apicem crasse tunicatis, 150 ≈ 20-25, octosporis; poro jodo violaceo-tincto; sporidiis ellipsoideis, utrinque subrotundatis, 1-cellularibus, guttam oleosam permagnam includentibus, hyalinis, 20-25 ≈ 10-12, distichis; paraphysibus filiformibus, septatis, 2 μ . cr. et versus apicem ramosis et usque ad 4 μ . cr. fuscidulis, epithecium crassum formantibus; hypothecio crasso, flavido.

Hab. in ramis ? emortuis Cratægi spec., Mt. Pleasant Iowa Amer. bor. (F. J. SEAVER). — A *Derm. cratægicola* Dur. sporidiis multo minoribus diversa.

3. *Dermatea Rickiana* Rehm, Ann. Mycol. VI (1908) pag. 319. — 5710
Ascomatibus sessilibus, rarissime solitariis, fere semper cæspitose aggregatis, demum in soros 1-2 cm. longos et latos plurimis arctissime congregatis et complicatis, cyathoides, ab initio globosoclausis, dein urceolatis, demum disco orbiculari explanato, crasse crenulato-marginato, alutaceo, interdum cinerescente, extus subgranulatis, 0,3-1,5 mm. diam., coriaceis, excipulo crasse prosenchymatico fusco, hyphis ad marginem discretis; hypothecio crasso, subfusco; ascis cylindræis, apice subtruncatis ca. 80 ≈ 5, octosporis, jodo immutatis; sporidiis cylindræis, rectis, utrinque obtusis, unicellularibus, cum guttis oleosis duabus submagnis, hyalinis, 6 ≈ 1,5, monostichis, rarius distichis; paraphysibus filiformibus, ca. 3 μ . crassis, obtusis, hyalinis, prominentibus.

Hab. ad culmum Guadua Taquaræ, parasitans in Rhopographo Taquaræ, Sao Leopoldo, Rio Grande do Sul Brasilæ (Rick S. J.). — *Cenangio helvolo* Jungh. proxima.

4. *Dermatea mycophaga* Masee, Kew Bull. (1910) p. 218. — Asco- 5711
matibus sessilibus carnosus, aggregatis, mox applanatis, disco ferrugineo, extus glabrato, obscuro, 0,5 mm. diam.; ascis; sporidiis monostichis, ellipsoideis, hyalinis, glabris, eguttulatis, 5 ≈ 3; paraphysibus filiformibus, sursum ramosis, brunneis.

Hab. in stromate vetustæ Xylariæ pr. Malacca (RIDLEY).

CENANGIUM Fr. — Syll. VIII p. 556, X p. 36, XI p. 423, XIV p. 795, XVI p. 763, XVIII p. 125.

1. *Cenangium heteropatelloides* Rehm, Contr. mycol. Hung. (Nöy. 5712 Közl. 1905) p. 3, Extr. — Ascomatibus sparsis, sæpe binis sessilibus, primitus globoso-clausis, dein brevissime crasse stipitatis, disco urceolato, denticulato-marginato, nigro-purpureo, denique subpatellaribus crasseque marginatis, excipulo glabro, crasso, fusco-nigris, 0,25-1,5 mm. diam., ceraceis siccis sæpe gyroplicatis; ascis clavatis, apice obtuse acutatis, 36-45 \times 6-7, octosporis; sporidiis cylindraceis, rectis, 1-cellularibus, hyalinis, 6-8 \times 1,5, distichis; paraphysibus filiformibus, septatis, haud clavatis, dilute purpureis, subconglutinatis.

Hab. ad caules Aconiti in alpidibus hungaricis (prof. LINHART). Margine primitus denticulato *Heteropatellæ* similis, ceterum plane diversa species.

2. *Cenangium rosulatum* von Höhnelt, Sitzb. k. Ak. d. Wiss. Wien, 5718 CXV Abt. I (1906) pag. 649, cum icon. — Ascomatibus 6-20 e cortice erumpenti-subconnatis, hemisphæricis, rosulas 4-6 mm. latis efformantibus, coriaceo-carnosulis ex umbrino fuliginosis, siccis nigricantibus, plus minus poculiformibus, 1-1,5 mm. diam., extus albo-pulveraceis, margine distincte albo-flocculosis; paraphysibus nullis v. paucis, filiformibus, hyalinis; ascis cylindraceis 70-110 \times 6-8, octosporis; sporidiis hyalinis, distichis, unilocularibus, subbotuliformibus, 10-14 \times 2-2,5, raro usque ad 20 μ . long. J —.

Hab. in ramulis putrescentibus Salicis purpureæ prope Tulln Austriæ inf. — *Cen. tryblidioidi* Ell. et Ev. affine a quo differt præcipue ascomatibus subconnatis. A *C. salicello* v. Höhn. et *C. Salicis* Schr. omnino diversum.

3. *Cenangium Pinastri* Karst., Acta Soc. pro Faun. et Fl. fenn. XXVII 5714 (1906) L, pag. 13. — Ascomatibus sessilibus, cæspitosis, coriaceo-membranaceis, levibus, subfarinaceis, fuscis vel fusco-nigrescentibus, epidermide secedente superficialibus, difformibus, hymenio pallidioribus, 2-5 cm. latis; ascis cylindraceis, circiter 160 \times 7-9; sporidiis monostichis, eguttulatis, rectis, 7-9 \times 4-5; paraphysibus filiformibus.

Hab. ad ramos aridos Pini silvestris prope Kuopio Fenniae (O. LÖNNBOHM). — *Cen. populneo* affine, sed differt ascomatibus minoribus, ascis sporidiisque diversis. *Cenangium populneum* (Pers.) Rehm, teste cl. Voglino, Ann. R. Accad. Agricolt. Torino LII (1909) p. 284 est status ascophorus *Dothichizæ populeæ* Sacc. et Briard.

4. **Cenangium luteo-griseum** v. Höhn., Stzb. k. Ak. d. Wiss. Wien 5715 CXVIII, Abt. I (1909) p. 379. — Ascomatibus coriaceis, sparsis v. paucis caespitose gregariis, breviter crasseque stipitatis, 1-2,5 mm. diam. primum globoso-clausis, dein apertis et subpatellaribus, margine albo v. flavidulo pilis hyalinis $80 \approx 2-3$ velutino, revolutis; disco flavo-sulphureo v. citrino, dein obscure flavo, extus leviter griseo brunneo-cinereo; stratu hymeniali 50-55 μ . cr.; hypothecio 200-250 μ . cr. plectenchymatico, basi et stipite brunneolis subparenchymaticis; excipulo brunneolo; ascis cylindraceo-clavatis, sessilibus, supra obtusis, 48-53 $\approx 4-5$, octosporis; paraphysibus filiformibus rigidis, 2 μ . cr. ascos subaequantibus; sporidiis distichis ex elongato cylindraceis, plerumque curvulis, utrinque obtusulis, hyalinis, 5-7 $\approx 1,7-2$. J. —

Hab. in ligno duro rubro-brunneo Dicotyledoneæ cujusdam, Tjibodas in ins. Java. — Cum *Cen. chrysoprasso* Cooke et *Helotio discreto* Karst. comparandum.

5. **Cenangium fallax** Rick, Broteria III (1904) fasc. IV, pag. 288. — 5716 Ascomatibus gregariis, subsessilibus, coriaceis, 2-3 mm. latis, externis primitus albis, pruinatis, dein fulvis, disco-brunneo-fusco, griseo-pruinato; in subiculo griseo, dein fulvo insidentibus; margine subtumido, excedente; ascis cylindraceis, gracilibus, $80 \approx 3$, stipitatis; sporidiis monostichis, hyalinis, ovoideis, biguttulatis, unilocularibus, 6 ≈ 3 ; subiculo etiam in speciminibus maturis bene evoluto et ascomata circumeunte.

Hab. in stromatibus et stipitibus Xylariæ cujusdam, Rio Grande do Sul, Brasilia. — *Cen. tahitensi* Pat. affinis species sed colore omnibus partibus albo-griseo et matrice satis diversa.

6. **Cenangium Umbellatarum** Ces. — Syll. VIII, p. 564 — var. **Cynanchi** Rehm, (Esterr. Bot. Zeitschr. LVI (1906) p. 343. — (Nomen nudum). 5717

Hab. in caulibus Cynanchi Vincetoxici, Innschlucht supra Landeck, Austria.

TYMPANIS Tod. — Syll. VIII p. 578, X p. 36, XI p. 424, XIV p. 798, XVI p. 764, XVIII p. 127.

1. **Tympanis acerina** Rehm, Contr. mycol. Hung. (Nöy. Közl. 1905) 5718 p. 4, Extr. — Ascomatibus primitus peridermio innatis, dein 4-10 arcte in caespitulos congregatis, per epidermidem laciniatim fissam prorumpentibus, globoso-clausis, dein patellaribus, disco orbiculari plano marginato, versus basim angustatis, 0,5-1 mm. diam., disco

udo cinereo-nigro, siccis atris, coriaceis; ascis cylindraceis, apice rotundatis, $120-130 \times 12-15$, jodo immutatis; sporidiis spermatoidis hyalinis, curvatis, $1,5 \times 1$, innumeris repletis (sporidiis ipsis nondum repertis); paraphysibus filiformibus, septatis, 2μ ., versus apicem 3μ . cr. ibique flavidulis conglutinatis; hypothecio fusciculo crasso.

Hab. in ramulo *Aceris campestris*, Berencsfalu, prope Selmeczbánya, Hungariæ (KMET). — Hucusque nulla *Tympanis* in *Acere* descripta.

2. *Tympanis Myricariæ* Rehm, (Esterr. bot. Zeitschr. LVI (1906) 5719 p. 343. — (Nomen nudum).

Hab. in ramulis *Myricariæ germanicæ*, Pfitschertal, Austria.

Sect. 2. Phæosporæ.

PHÆANGIUM Sacc. — Syll. VIII p. 592, X p. 37, XI p. 424, XIV p. 798, XVIII p. 128.

1. *Phæangium Vogellii* P. Henn., Verh. Bot. Ver. Prov. Brandb. L 5720 (1908) p. 132. — Ascomatibus sparsis v. cæspitosis, erumpenti-superficialibus, coriaceis, primo clausis dein cupulatis, sessilibus, sulcato-rugosis, rufo-brunneis v. castaneis, pilis filiformibus, septatis, sæpe flexuosis, brunneis v. castaneis $100-250 \times 10-20$ vestitis, disco atro-fusco, levi, circ. $1-1,5$ mm. diam.; ascis cylindraceo-clavatis, vertice obtuse rotundatis, octosporis, $60-80 \times 4-5$; paraphysibus repetito-ramosis, filiformibus, apice vix incrassatis, guttulatis, hyalinis, c. 2μ . cr.; sporidiis oblique monostichis, ellipsoideis, biguttulatis, $7-9 \times 3,5-4$, fusco-atris; hypothecio ochraceo.

Hab. in trunco acerino prope Tamsel Germania (VOGEL).

2. *Phæangium sphæroides* Ell. et Ev. Bull. South Calif. Ac. of Sc. 5721 IV (1905) p. 62. — Gregarium; ascomatibus rotundis, nigris, levibus, primum globosis dein depressis obconicis, disco plano vel concavo, udis convexis, $\frac{1}{3}-\frac{3}{4}$ mm. diam., siccis margine incurvato; ascis cylindraceis, p. sp. $50-55 \times 4$; paraphysibus obscuris; sporidiis monostichis, oblongo-ellipsoideis, subopacis, $6-8 \times 3-4$.

Hab. in ligno dealbato *Rhamni* et *Rhois laurinae*, Aralon, Catalina Isl., California (C. F. BAKER).

HYMENOBOLUS Mont. — Syll. VIII p. 587.

1. **Hymenobolus Kmetii** Rehm, Contr. mycol. Hung. (Növ. Közl. 1905) 5722 p. 4, Extr. — Ascomatibus sparsis, primitus sub cortice exteriori nidulantibus, globoso-clausis, dein per peridermium elevatum varieque dilaceratum erumpentibus, excipulum irregulariter laciniatim aperientibus et discum patellarem orbicularem, demum sæpe lirellæformiter curvatum, fusco-nigrum denudantibus, extus fuscis, glabris, excipulo crasso parenchymatico, siccis corrugatis, 2-4 mm. long., c. 1 mm. lat.; ascis cylindraceutis, apice rotundatis, haud incrassatis, 4-sporis, $100-120 \approx 25$; sporidiis oblongo-globulosis, glabris, unicellularibus, haud guttatis, fuscis, $25 \approx 18$, strato mucoso lato obductis, 1-stichis; paraphysibus filiformibus, 2 μ , ad apicem dilute fuscescentem 3 μ . cr., septatis, conglutinatis; hypothecio flavidulo.

Hab. in ramo emortuo *Quercus*, Berencsfalu, prope Selmezbánya, Hungariæ (KMET). — Species valde memorabilis a *Stictophacidio* excipulo multo crassiori paraphysibusque haud ramosis diversa.

Sect. 3. Didymosporæ.**CENANGELLA** Sacc. — Syll. VIII p. 587, X p. 37, XI p. 424, XIV p. 798, XVIII p. 127.

1. **Cenangella spiræcola** P. Henn. Hedw. XLV (1905) pag. 29. — 5723 Ascomatibus sparsis v. subaggregatis, erumpentibus, primo subturbinatis clausis, atris, dein subcupulatis, breve stipitatis, 400 μ . c. cr., coriaceis, striatulis, margine crenulatis, fimbriatis, contextu atro-olivaceo; ascis cylindraceuto-clavatis, obtusis, 8-sporis, $90-110 \approx 5-6$; paraphysibus filiformibus, hyalinis c. 1,5 μ . cr., apice paullo usque ad 2 μ . incrassatis, superantibus; sporidiis subdistichis oblonge fusoideis, utrinque subacutiusculis, primo continuis, dein medio septatis, haud constrictis, $10-13 \approx 1,5-2$.

Hab. in ramis siccis *Spirææ*, Michailowskoe Rossie (Mosso-LOFF). — Habitus *Scleroderridis Spirææ* Rehm.

2. **Cenangella alnicola** Rehm, Contr. mycol. Hung. (Növ. Közl. 1905) 5724 p. 3, Extr. — Ascomatibus solitariis v. binis, primitus innatis, per peridermium laciniatim disruptum erumpentibus, primitus clausis, turbinatis, brevissime crasse stipitatis, dein disco urceolato, demum patelliformi, orbiculari, crasse marginato, nigro-fusco, extus gla-

bris, obscure fusco-ferrugineis, prosenchymaticis, ex hyphis intricatis fuscis contextis, 1-5 mm. diam., siccis complicatis; ascis clavatis, apice rotundatis, $75-80 \approx 7-9$, octosporis; sporidiis oblongis, utrinque obtusis, rectis vel subcurvatis, hyalinis, medio septatis, plerumque utroque apice breviter filiformiter appendiculatis (conidiferis), $9-10 \approx 2,5$, distichis; paraphysibus filiformibus, versus apicem sensim 3 μ . cr. et fuscidulis.

Hab. in cortice Alni incanæ, Hungaria (HAZSLINSZKY sub «Dermatea furfuracea» in herb.). — Species hungarica modo colore *D. furfuracea* similis, partibus internis plane divergit, imprimis sporidiis septatis. *Cenangella alnicola* Feltg. (1903) — Syll. XVIII, p. 128 — certe diversa est, sed quoad genus incerta, hinc nomen præsentis interim non mutandum videtur.

3. *Cenangella bambusicola* Rick, Broteria V (1906) p. 37. — Asco- 5725
matibus disciformibus, sessilibus, cartilagineis, duriusculis, primitus albidis, dein viridi-flavis, glabriusculis, 1 mm. latis, margine crasso involuto; ascis $70 \approx 9$; sporidiis fusiformibus, hyalinis, octonis, septatis (an spurie?), 20 μ . longis 4 μ . latis, guttulatis; paraphysibus filiformibus, versus apicem paulatim incrassatis, multiseptatis, fere hyalinis, epithecium densum formantibus, conglutinatis cum ascis.

Hab. in ramis vivis Bambusæ, Rio Grande do Sul Brasiliæ.

Sect. 4. Phragmosporæ.

SCLERODERRIS Fr. — Syll. VIII p. 594, X p. 37, XI p. 425, XIV p. 799, XVI p. 765, XVIII p. 129.

1. *Scleroderris gigaspora* Massee, Kew Bull. (1910) p. 3, f. 1-5. — 5726
Ascomatibus gregariis, innato-superficialibus, cylindræco-turbinatis v. e mutua pressione difformibus, sessilibus, extus sordide fuscis, glabris, disco concavo, 1 mm. diam.; ascis cylindræceis, sursum obtusatis, deorsum breviter tenuato-stipitatis, octosporis, $250-280 \approx 22-25$, paraphysibus tenuibus apice ramosis, hyalinis obvallatis; sporidiis vermiformibus, rectis v. leniter flexuosis, multiseptatis, hyalinis, $150-160 \approx 7-8$.

Hab. caespitose in scutellis Mytilaspidis citricolæ ad folia Citri Aurantii, Trinidad Indiæ occid. (J. H. HART). — Affinis *Scl. seriata* et *Scl. virescenti* sed asci et sporidia multo longiora et habitatione diversa.

PHÆODERRIS Sacc. — Syll. VIII p. 599, XIV p. 32.

1. *Phæoderris Labiatarum* von Höhn., Österr. Bot. Zeitschr. LVII 5727 p. 323. — Ascomatibus innatis, sparsis, globoso-disciformibus, 400-500 μ . lat., 200 μ . alt. excipulo margine 40 μ . cr., lateraliter usque ad 120 μ . cr., ex cellulis 6-8-pluristratosi crasse tunicatis conflato donatis, extus atro-brunneis, ostiolo carentibus et laciniatim dehiscentibus; hypothecio 50 μ . cr.; ascis clavatis breve, stipitatis 90 \times 9-10, octosporis; sporidiis pluriseriatis, brunneolis, fusoides, 6-cellularibus, medio constrictis, fere biconicis, 29-36 \times 4-5,5; paraphysibus filiformibus copiosis.

Hab. in caulibus emortuis *Salviae glutinosæ*, Wienerwald Austriæ.

Sect. 5. Dictyosporæ.

DERMATINA Sacc. — Syll. VIII p. 492 (ut subgen.).

1. *Dermatina javanica* v. Höhn., Fragm. Mykol. IX in Sitzb. k. Ak. 5728 d. Wiss. Wien CXVIII, Abt. I (1909) p. 1519. — Ascomatibus tenaci-carnosis, subcoriaceis, solitariis v. paucis approximatis, in stromate pallido adnato insidentibus, flavo-ochraceis v. flavo-brunneolis, dein griseo-brunneis, usque ad 700-850 μ . latis, 400-600 μ . altis, supra depresso convexis, vix marginatis, basi in pedicellum obscuriorem 160-230 μ . cr., 210-260 μ . lon. abrupte angustatis; stratu hymeniali circ. 140 μ . cr.; ascis clavatis, tunica 1,5 μ . supra usque ad 4 μ . cr. præditis, basi sensim stipitiformi noduloseque angustatis, supra attenuatis, obtusiusculis, octosporis 90-140 \times 16-21; J +; paraphysibus filiformibus apice sæpe breviter ramosis v. sensim usque ad 8 μ . claviformi-incrassatis, 1,5 μ . latis, flavo-guttulatis; sporidiis distichis, elongatis, apice rotundatis, plerumque diu unilocularibus, demum transverse 3-5-septatis, loculis mediis longitudinaliter uniseptatis, tenuiter tunicatis, hyalinis, demum flavidis, 22-28 \times 8-10,5; hypothecio 130-160 μ . cr. flavo-ochraceo, parenchymatico; excipulo margine 20 μ . circ. cr. deorsum sensim usque ad 60 μ . cr. ex hyphis extus in pilos 20 \times 9, 1-2-septatos abeuntibus; contextu pedicelli minute parenchymatico, supra plectenchymatico.

Hab. in cortice arboris cujusdam in silvis Tjibodas in ins. Java.
— *Dermateæ eucritæ* Karst. affinis.

Fam. 7. Bulgariaceæ FR.

Sect. 1. Hyalosporæ.

LEOTIA Hill — Syll. VIII p. 609, XVIII p. 131.

1. **Leotia punctipes** Peck, Bull. Torr. Bot. Club XXXIV (1907) p. 102. 5729

— Ascomate subgloboso, undulato, gyroso, lucido, obscure viridi, in sicco 4-8 mm. lato; stipite angusto 1,8-3 cm. longo, 1-3 mm. cavo, minute obscure viridi-punctato, viridulo-sed pileo pallidiori; ascis cylindræis v. subclavatis; sporidiis oblongis, rectis v. curvulis, 15-20 \times 5-6; paraphysibus filiformibus.

Hab. inter Sphagna, Stow Massachusetts Amer. bor. (S. Davis). — *Leot. chlorocephalæ* Schw. affinis.

2. **Leotia Batailleana** Bres., Fungi gall., Ann. Myc. vol. VI (1908) 5780

p. 47. — Ascomate globoso, levi, ceraceo, basi parva vallecula a stipite remoto, læte roseo, intus concolori sed strato ascorum aurantio-luteo, 2-3 mm. diam.; stipite farcto, ruguloso, glabro, dilute roseo extus intusque, 3-4 mm. longo, $\frac{1}{2}$ -1 mm. crasso; ascis clavatis, 105-114 \times 6, jodo poro cærulescente; paraphysibus filiformibus, 1-1 $\frac{1}{2}$ μ . crassis, apice incrassato, 2-3 μ ., granulis fuscis repleto; sporidiis fusoides, uno latere subdepressis, crasse guttulatis, hyalinis, continuis, 20-30 \times 3-4.

Hab. ad terram gregarie v. subcæspitose, Jura (FRID. BATAILLE). — Specimina vetusta tantum vidi, sed ista vix dubie ascomate luteo-aurantio gaudent e strato ascorum ita colorato (Bresad. l. c.).

Leotia species dubiæ, in Syll. XIX, p. 1073 citatæ, sunt: *Leotia helvelloides* (Corda) et *Leotia Persoonii* (Corda).

SARCOSOMA Casp. — Syll. X p. 42, XI p. 427, XIV p. 804, XVI p. 771, XVIII p. 132.

1. **Sarcosoma godronioides** Rick, Broteria V (1906) p. 32. — Asco- 5731

matibus gregariis, ramosis, ex thallo membranaceo, atro oriundis, lageniformibus, gelatinosis, 1 cm. altis, $\frac{1}{3}$ cm. latis, stipitatis, in medio incrassatis, stipite et parte superiore angustioribus, apice extus striato et granulato, foramine minuto apertis; intus in cavitate sphaerica hymenium gerentibus; hymenio olivaceo 1 mm. cr.; ascis longissimis 14-18 μ . latis, paucis, octosporis; sporidiis hya-

linis v. olivascentibus, elliptico-fusoideis, apicibus acutatis, membrana reticulata, 30×15 ; paraphysibus fuscidulis, longissimis, multiseptatis, filiformibus.

Hab. in ramulis deciduis Pini, Rio Grande do Sul Brasiliæ.

2. *Sarcosoma Wettsteinii* v. Höhnelt, *Ergeb. Bot. Exp. Südbras.* 1901, 5732

Denk. k. Ak. d. Wiss. Wien Bd. LXXXIII (1907), Extr. p. 31.

— Ascomatibus solitariis mycelio nigro-brunneo insidentibus, depressoglobosis, basi profunde depressoplicatis, convexis, supra depressoconcavis, carnosius, margine tenui, nigro, piloso, involuto præditi, extus tomento brunneo-nigro ex hyphis violaceo-brunneis septatis, apice obtusis pallidioribus, 4-7 μ . cr. constituto; hypothecio 7 mm. cr., gelatinoso-carnoso, translucide cyaneo-albo, plectenchymatico; disco 700-750 μ . cr., supra rubro-violaceo, levi, 18 mm. lato; ascis longe cylindraceis, stipitatis, 600×20 , octosporis, tunica firma præditi, supra rotundatis, vix incrassatis; sporidiis supra monostichis, confertis, unilocularibus, hyalinis, crasse tunicatis, levibus, ellipsoideis utrinque attenuato-obtusis, $36-50 \times 16-18$. J —.

Hab. in caule emortuo lianæ cujusdam, prope Cerquina-Cesar, Sao Paulo, Brasilia.

3. *Sarcosoma orientale* Patouill., *Bull. Soc. Myc. de Fr.* XXV (1909) 5733

p. 3, tab. II, fig. 4. — Ascomate magno, pendulo, hemispherico, inferne truncato, levi aut varie rugoso-plicato, tremelloso, sessili, extus atro-brunneo, minute furfuraceo, intus albido-fuliginoso; disco marginato, plano, orbiculari, pulchre aurantio-flavo; ascis cylindraceis, longissimis, $350-500 \times 20$, octosporis, operculatis, paraphysibus elongatis, filiformibus, fasciculatis, apicem versus incrassatis (3-5 μ .), granulis aurantiacis repletis; sporidiis monostichis, hyalinis, ellipsoideis, magnis, $42-50 \times 16-18$, crassiuscule tunicatis, verrucis obtusis parce obsessis.

Hab. in liana emortua ignota, in Valle Djirin Annam, 1600 m. alt. (EBERHARDT).

4. *Sarcosoma tetrasporum* von Höhnelt, *Ergeb. Bot. Exp. Südbras.* 5734

1901, Denk. k. Ak. d. Wiss. Wien. Bd. LXXXIII (1907), Extr.

p. 32. — Ascomatibus solitariis, obconicis, conoideo-stipitatis, 2 cm. latis, 9 mm. altis, molli-gelatinosis, omnino rubro-violaceis, hypothecio 8 mm. cr. ex hyphis plectenchymaticis constituto, violaceo-rubidis, margine tenuioribus; stipite basi velutino, ascomate vero glabro, basi extus ruguloso, ceterum levi; paraphysibus numerosis, filiformibus, 2-3 μ . cr., supra quandoque incrassatulis; ascis tunica firma præditi, supra obtusatis, cylindraceis, basi sen-

sim in stipitem attenuatis, 380-400 \approx 12-16, 2-3- sed plerumque 4-sporis; sporidiis monostichis, hyalinis, crasse tunicatis, ellipsoideis, saepe uno latere depressis, guttulatis, unilocularibus, 18-26 \approx 12-13. J -.

Hab. in ligno putri, Morro da Senhora prope Iguape, Sao Paulo Brasilia.

OMBROPHILA Fr. — Syll. VIII p. 613, X p. 38, XI p. 425, XIV p. 801, XVI p. 766, XVIII p. 133.

1. **Ombrophila tamseliana** P. Henn., Verh. bot. Ver. Prov. Brandb. 5735 L (1908) p. 133. — Ascomatibus foliiculis sparsis v. gregarie caespitosis, breve stipitatis, primo subturbinatis, clausis, dein cupulatis undulatis, marginatis, castaneis, levibus, disco castaneo, 1,5-2 mm. diam., stipite breviter cuneato c. 1 \approx 0,5 mm., atro-brunneo; ascis clavatis, apice obtuse rotundatis, octosporis, 80-110 \approx 6-8; paraphysibus filiformibus vix incrassatis, hyalinis; sporidiis fusoides, utrinque subacutis, rectis v. curvulis, 2-4-guttulatis, oblique mono-v. subdistichis, hyalinis, 12-15 \approx 3,5-4.

Hab. in foliis putrescentibus Betulae prope Tamsel Germania (VOGEL). — Colore nec non sporidiis elongato-fusoides curvulis distincta.

2. **Ombrophila Exidia** Spegazz., Myc. Arg. IV, in An. Mus. Buenos Aires (1909) pag. 453. — Ascometibus subsessilibus subtenuibus, extus intusque laxè ruguloso-costulatis, concavis, fuliginis, glaberrimis, udis subtremlloideis et subpellucidis, siccis subcorneis, majusculis, 5-25 mm. diam., margine acuto integro involuto; ascis linearibus, jodo vix caeruleiscentibus, dense paraphysatis, apice rotundatis, longe tenuato-pedicellatis, 400-500 \approx 15-20, octosporis, paraphysibus fumosis septulatis, 4-5 μ . cr.; sporidiis ellipsoideis in parte sup. ascis constipatis, utrinque rotundatis, 14-16 \approx 7-8, rectis v. lenissime inaequilateris, eguttulatis, hyalinis.

Hab. ad ramulos aridos putres in insula Santiago prope La Plata, Argentina (C. MARELLI).

3. **Ombrophila hirtella** Rehm, Ann. Mycol. VI (1908) pag. 314. — 5737 Ascomatibus gregaris, sessilibus, lenticularibus, primitus clausis, dein patellaribus, disco plano, orbiculari, marginato, cinereo, excipulo fusco, hyphis simplicibus, septatis, rectis, fuscis, ca. 60 \approx 5-6, versus basim excipuli subhyalinis obtectis, usque ad 4 mm. diam., siccis involutis, subgelatinosis; ascis clavatis, apice rotundatis, 55-60 \approx 5-6, jodi ope caeruleiscentibus, octosporis; sporidiis fusoides,

rectis vel curvatis, 1-cellularibus sine guttulis, hyalinis, 7-8 \times 2,5-3, monostichis; paraphysibus filiformibus, hyalinis, 1,5 μ . cr.

Hab. in ligno putri, Glencoe, Illinois Amer. bor. (E. T. et S. A. HARPER) — Licet pilosula, imprimis reactionis jodice causa, potius *Ombrophila* quam *Lachnea*.

4. *Ombrophila Kmetii* Rehm, Contr. mycol. Hung. (Növ. Kö-l. 1905) 5738 p. 5, Extr. — Ascomatibus dispersis, sessilibus, primitus globoso-clausis, dein urceolatis, demum patellaribus, crasse marginatis, in stipitem brevissimum crassum elongatis, glabris, subferrugineis, 3 mm. d., gelatinoso-ceraceis; ascis cylindraceis, apice rotundatis, 120-130 \times 5-7, octosporis, poro jodo tinctis; sporidiis oblongis, utrinque rotundatis, 1-cellularibus, guttas 2 oleosas magnas includentibus, inde fere 2-cellularibus, hyalinis, 1-stichis, 8-10 \times 3,5-5; paraphysibus filiformibus, hyalinis, 1 μ . ad apicem 2 μ . cr.; excipulo crasso parenchymatico.

Hab. in Polyporo obliquo sessilis, Berencsfalu prope Selmeczbánya, Hungaria (KMET). — Quoad habitum et colorem *Helotiis* similis species, ab *Ombrophila firmula* (Roll.), quæ etiam Polyporum incolit, colore, ascis cylindraceis sporisque oblongis, haud fusiformibus plane differt.

ORBILIA Fr. — Syll. VIII p. 621, X p. 39, XI p. 426, XIV p. 802, XVI p. 767, XVIII p. 137.

I. *Eu-Orbilia*: paraphysibus apice capitulatis.

1. *Orbilia mollisioides* v. Höhn., Fragm. Mykol. (1909) IX, in Sitzb. 5739 k. Ak. d. Wiss. Wien CXVIII, Abt. I, p. 1521. — Ascomatibus superficialibus epiphyllis in maculis 1-10 mm. latis, irregulariter rotundatis, pallidis modice gregarie insidentibus, primum flavo-brunneis obscurius marginatis, depressis, siccis obscure brunneis, incurvatis, 120-230 μ . latis, rotundatis, basi usque ad 65-85 μ . angustatis, ibique rotundatis, obscure brunneis, marginatis; contextu basi tenuiter plectenchymatico; excipulo parenchymatico; ascis clavatis, breviter pedicellatis, supra rotundatis v. parum conoideo-angustatis, octosporis, 44-56 \times 6-8; paraphysibus filiformibus 1,5-2 μ . cr. supra conoideo-globosis et 4 μ . cr. et epithecium efformantibus; sporidiis mono- v. distichis, hyalinis, unilocularibus, elongato-fusoides, apice obtusulis, rectis v. vix incurvatis, 8-12 \times 1,5-2. J +.

Hab. in foliis putrescentibus *Quercus rubræ*, Kurpark in Schandau Saxonia (KRIEGER, Fungi saxon. n. 1997).

2. *Orbilia botulispora* v. Höhnelt, Fragm. z. Mykol. Sitzb. k. Ak. d. 5740 Wiss. Wien, Bd. CXVI, Abt. I (1907) pag. 131. — Ascomatibus gregariis, late adnatis, depressis, margine revolutis, vitellinis, siccis flavo-ochraceis, aquoso-carneis, 0,3-1,4 mm. latis et usque ad 400 μ . crassis; hypothecio bistratoso; excipulo parenchymatico ad marginem cellulis minutis prismaticis constituto; paraphysibus tenuissimis, supra usque ad 3 μ . globoso-incrassatis, flavis; ascis basi cylindraceo-cuneatis, 30-36 \approx 2,5-3, octosporis; sporidiis plerumque monostichis, allantoides, subcirculariter incurvatis, 2-3 \approx 1.

Hab. in ligno fagineo putri prope Rekawinkel Austriæ inf.

3. *Orbilia aurantio-rubra* Boud., Icon. mycol. t. III (1906) pl. 464, 5741 Hist. et Classif. Discomyc. Europe (1907) p. 103. — Pro genere media 0,5-2 mm. lata, intus et extus aurantio-miniata; cupulis primo regularibus, dein plus minusve undulatis, levibus; ascis cylindraceis, ad basim attenuatis, ad apicem truncatis, octosporis, 60-80 \approx 5-6; paraphysibus ad apices clavato-capitatis, 5-7 μ . cr., albis, intus guttulatis; sporidiis hyalinis, elongatis, cylindraceis sed varie undulatis et tunc vermiformibus, 15-18 \approx 2.

Hab. ad corticem Ulmi, Marne, Gallia.

4. *Orbilia crenulato-lobata* von Höhnelt, Ergeb. Bot. Exp. Südbras. 5742 1901, Denk. k. Ak. d. Wiss. Wien, Bd. LXXXIII (1907) Extr. pag. 31. — Ascomatibus superficialibus, sparsis, albo-translucidis, cartilagineis, membranaceo-firmis, 1-3 mm. latis, primum cupulatis dein expansis et margine involutis, levibus, 200 μ . diam., hyphis rugulosis tenuibus, hyalinis 5-6 μ . crass. basi adhærentibus ceterum glaberrimis, margine processibus confertis, 70-80 μ . alt. pluri-stratosi ex cellulis rotundis 4-5 μ . diam. formati præditis; disco 12-16 μ . cr. (immature); ascis circ. 3 μ . cr.; paraphysibus filiformibus, supra inflatis; sporidiis verisimiliter minutis allantoides; contextu 80 μ . cr., parenchymatico.

Hab. in cortice putri ad flumen Rio Branco prope Conceição Sao Paulo, Brasilia. — *O. sinuosæ* Penz. et Sacc. affinis.

II. *Hyalinia* (Boud.): paraphysibus apice æqualibus.

5. *Orbilia inflatula* Karst. — Syll. VIII, p. 627 — *Hyalinia inflatula* 5743 (Karst.) Boud. Disc. p. 104. — var. *Lonicæræ* Rehm in Strasser Verh. k. k. zool. bot. Ges. Wien LX (1910) p. 472. — Ascomatibus gregariis,

in ligno denudato sessilibus, primitus globosis dein patellaribus, margine acuto tenuissimo cinctis, 0,2-0,7 mm. diam., intus glabris, dilute hyalino-lutescentibus, disco demum pallidiore, excipulo prosenchymatico, hyalino, subgelatinoso, hyphis 4 μ . latis, siccis subconvolutis; ascis clavatis, apice rotundatis, 20-25 \times 4, octosporis, jodo immutatis; sporidiis oblongis, utrinque obtusis, subcurvatis, 1-cellularibus, utrinque 1-guttulatis, hyalinis, 5-7 \times 1-1,2; paraphysibus filiformibus 2 μ . cr. haud clavatis, hyalinis.

Hab. in ramo decorticato *Lonicerae*, Ybbsitz Austria inf. (P. LAMBERT).

6. *Orbilia nostra* (Rehm) Sacc. et Trott., *Hyalinia nostra* Rehm, Ann. 5744 Mycol. IV (1908) pag. 117; Ascom. exsicc. fasc. 41, n. 1754. — Ascomatibus dispersis, sessilibus, globulosis, dein patellaribus, tenuissime marginatis, hyalino-flavidulis v. subaureis, extus glabris, 100-150 μ . diam., excipulo tenuissimo parenchymatice contexto, membranaceis, siccis vix visibilibus; ascis clavatis, versus apicem subacutatis incrassatisque, 45-50 \times 12, octosporis, J +; sporidiis oblongis, utrinque rotundatis, rectis, subconstricto-didymis, unilocularibus, utrinque guttam oleosam v. guttulas plurimas continentibus, an demum bilocularibus; hyalinis, 10-12 \times 4, distichis; paraphysibus perpauca, filiformibus, obtusis, hyalinis, 3 μ . cr.

Hab. ad acus recenter delapsos *Laricis japonicæ* in horto Neufriedenheim Monacensi Bavaricæ (REHM).

7. *Orbilia sericea* P. Henn., Hedw. (1905) XLV, p. 29. — Ascomatibus dense gregariis, primo clausis, dein applanatis subdiscoideis vix marginatis, undulatis, sessilibus, membranaceo-subgelatinosis, levibus, pallidis v. subisabellinis, sericeis 300-350 μ . c. cr.; ascis cylindraceo-clavatis, obtusis, 8-sporis, 18-22 \times 3; paraphysibus filiformibus, hyalinis, c. 0,5 μ . cr.; sporidiis subdistichis v. oblique monostichis, fusoides, hyalinis, continuis, 4-5 \times 0,5.

Hab. in ligno putri, Michailowskæ Rossicæ.

8. *Orbilia breviasca* P. Henn., Verh. Bot. Ver. Prov. Brandenb. I. 5746 (1908) p. 132. — Ascomatibus lignicolis, superficialibus, sparsis, primo clausis, dein angulato-discoideis, marginatis, gelatinosis, flavo-aurantiacis, 1-1,5 mm. diam., disco concolori, levi; ascis breve clavatis, apice obtuse applanatis, octosporis, 20-25 \times 3-3,5, paraphysibus filiformibus, hyalinis, c. 0,5 μ . cr., apice haud incrassatis; sporidiis subdistichis v. subtristichis, cylindraceis, subfusoides, utrinque obtusis v. subacutiusculis, rectis, hyalinis, 6-7 \times 0,5.

Hab. in ligno putri prope Tamsel, Germania (VOGEL). — O.

luteo-rubellæ (Nyl.) Karst. affinis, a qua differt ascis brevioribus apice non incrassatis, paraphysibus sporidiisque angustioribus etc.

9. *Orbilia crenato-marginata* (v. Höhn.) Sacc. et Trott., *Hyalinia crenato-marginata* v. Höhn., *Fragm. zur Mykol.*, III, Sitzb. k. Ak. d. Wiss. Wien Bd. CXVI, Abt. I (1907) p. 132. — Ascomatibus superficialibus, gregariis, tenuissimis, depressis, subhyalinis, flavido-albis, siccis pallide roseis, rotundatis, 320-630 μ . latis, basi lata insidentibus; excipulo tenui parenchymatico, cellulis 8-12 μ . latis ad marginem minoribus; margine denticulato-piloso; ascis octosporis, clavatis, sessilibus, 25 \times 3-4; paraphysibus simplicibus filiformibus, 1-2 μ . crassis, apice depresso capitellatis; sporidiis hyalinis, breviter filiformibus, vermiformibus, subclavulatis, 6-8 \times 0,5-1.

Hab. ad truncos putres, Wienerwald Austriae inf.

10. *Orbilia albo-marginata* Rehm, *Österr. Bot. Ztschr.* LVI (1906) p. 344 (Nomen nudum).

Hab. in caulibus emortuis Aconiti, Schrofенpass, Tirolia Austria.

PTEROMYCES B. R. S. in Saccardo, *Not. Myc.* VI, *Ann. Myc.* III (1905) p. 507 (Etym. *pteron* ala et *myces*). — Ascomata perexigua, depresso globulosa, tenuissime carnosula, pallide colorata, supra circulariter dehiscencia et discum (nucleum?) pallidiorem ostendentia; excipuli contextu tenuissime pseudoparenchymatico, margine subintegro non reflexo nec vere distincto. Asci e basi fasciculati, clavulati, subsessiles, octospori, paraphysibus bacillaribus cincti. Sporidia ovoidea, continua, hyalina, minuta. — Genus pulchellum *Orbilicæ* et *Pezizellæ* subaffine sed ascomate diu (ut videtur) urceolato et margine proprio carente nec non habitatione peculiari statim dignoscitur. Inter Bulgariaceas prope *Orbiliam* interim locandum.

1. *Pteromyces ambiguus* B. R. S. in Saccardo, l. c. p. 508. — Ascomatibus dense gregariis v. confertis, depresso-globosis, perexiguis, 70-100 μ . diam., e fulvescenti dilute roseis, glabris, sessilibus, initio subcuticularibus, disco pallidiore, contextu laxiuscule et tenerime celluloso, fulvo-rubescenti; ascis ex obovoideo demum clavulatis, basi breve tenuatis subsessilibus, apice rotundatis integris non foveolatis, 18-22 \times 7-8, octosporis; paraphysibus bacillaribus, sursum tenuiter clavulato-incrassatis, sæpe curvatis ascum paullo superantibus; sporidiis distichie, ovoideis, hyalinis, intus faretis, 3-4 \times 1,5-2, extra ascos 6 \times 3.

Hab. sub cuticula v. membranula caulis pennarum subputrescentium Phasiani, La Panne, Furnes, Martio 1904 (MARIA ROUSSEAU). — Socia adsunt *Phoma pterophila* (Cfr. infra) et *Fusarium gallinaceum* Cooke et Harkn.

GLÆOCALYX Masee — Syll. XVIII, p. 132.

1. *Glæocalyx rufa* (Schw.) Sacc. — Syll. VIII, p. 638 (*Bulgaria*) — 5750
var. *magna* Peck, N. York State Mus. Bull. n. 105 (1905) p. 31.
— Ascomatibus majusculis, 7-10 mm. diam., sessilibus, subplanis, subinde irregularibus v. undulatis, basi lata tempore udo strato gelatinoso albido inserta, disco ochraceo-brunneo; sporidiis hyalinis, 20-30 \times 12.

Hab. ad terram inter folia Abietis et muscos North Elba Amer. bor. — Excipulum extus venoso-subreticulatum ut in typo. Ob sporidia hyalina a gen. *Bulgaria* desciscit.

HÆMATOMYCES B. et Br. — Syll. VIII p. 633, X p. 40.

1. *Hæmatomyces eximius* Rick, Broteria V (1906) p. 28. — Asco- 5751
mate gelatinoso, cerebriformi et tremelloideo, prorumpente, convolutionibus crassis, firmis, globoso, 5 cm. diam., castaneo; ascis cylindraceis, 130 \times 6-8; sporidiis ellipsoideis, 6-8 μ . longis, 4 μ . cr., biguttulatis, apiculatis v. etiam apice truncatis, viridulo-hyalinis, dein olivascentibus, biserialibus, unilocularibus; paraphysibus filiformibus, apice paulatim minute incrassato, hyalinis, versus pedem viridulo-olivaceis.

Hab. ad truncum putridum, Rio Grande do Sul Brasiliæ. — *Hæmat. spadiceo* affinis.

Sect. 2. Phæosporæ.

BULGARIA Fr. — Syll. VIII p. 636, X p. 41, XIV p. 804, XVI p. 770, XVIII p. 140.

1. *Bulgaria pusilla* Syd., Ann. Mycol. VIII (1910) pag. 40. — Ple- 5752
rumque sparsa, e cortice erumpens, breve crasseque stipitata, stipite ca. 1-2 mm. alto et crasso, primitus obovoidea et clausa, dein aperta dilatato-turbinata, orbicularis, glabriuscula, atra, 2-5 mm. diam.; ascis anguste clavatis, basi stipitiformi-attenuatis, 70-110 \times 8-11, octosporis; sporidiis oblique monostichis, oblongis, utrinque

leniter attenuatis, continuis, primo hyalinis, dein olivaceo-brunneis, 17-20 \times 5-6 $\frac{1}{2}$; paraphysibus numerosis, hyalinis, filiformibus.

Hab. ad corticem, Pauai 2100 m. alt., provincia Benguet, Luzon, ins. Philipp. (R. C. Mc GREGOR et E. D. MERRILL). — *Bulgariæ turbinatæ* affinis sed asci et sporidia multo angustiora.

BULGARIELLA Karst. — Syll. VIII p. 638, XVIII p. 131.

1. *Bulgariella argentinensis* Speg., Myc. Arg. IV, in An. Mus. Buenos Aires (1909) p. 454. — Ascomatibus parvis, sessilibus, e turbinato patellaribus, atro-vinosis, subiculo parcissimo radiante insidentibus, 2-5 mm. diam., eximie marginatis, hyphis radiantibus fuligineis pellucidis, 100-1500 \times 10-15, parce ramulosis septulatis basi cinctis, disco vinoso, udis subgelatinosis, siccis subcorneis; ascis linearibus paraphysatis apice subtruncato-rotundatis, deorsum tenuato-pedicellatis 75-80 \times 5, octosporis; sporidiis ellipsoideis, fuligineis, grosse 2-guttulatis, minutis, 8 \times 4, recte monostichis, utrinque obtusissimis, sæpe medio lenissime coarctatis.

Hab. ad truncos emarcidos mucidos in silvis secus Rio Colorado, prov. Jujuy, Argentina.

VOELTZKOWIELLA P. Henn. in Voeltzkow Reise Ostafrika III (1908) pag. 31 (Etym. a cl. prof. ALFR. VOELTZKOW, viatore Afric.). — Mycelium gelatinoso-membranaceum, effusum ex hyphis coloratis septatis consistens; ascomata gelatinoso-carnosa, cupulato-discoidea, sessilia superficialia; asci cylindraceo-clavati, octospori; paraphyses filiformes, ramosæ, coloratæ; sporidia ellipsoidea, continua, colorata. — Gen. *Sarcosomati* et *Bulgariæ* affine sed differt mycelio gelatinoso et ascomatibus superficialibus.

1. *Voeltzkowiella madagascariensis* P. Henn., l. c. pag. 31, tab. III, fig. 26. — Mycelio membranaceo-gelatinoso effuso, ex hyphis septatis, ramosis, brunneis, c. 4-6 μ . cr. consistente, conidiis fuscis, ovoideis v. ellipsoideis, 6-7 \times 4-5; ascomatibus superficialibus subgelatinosis, cupulato-planis, marginatis, extus pallido-fuscescentibus, levibus, disco plano, fusco-brunneo, c. 2 cm. longo, 1 cm. lato, 2 mm. cr., carne pallida gelatinosa; ascis clavatis, vertice obtuso-rotundatis, octosporis, 100-140 \times 15-20; paraphysibus filiformibus hyalinis 3,5-4 μ . cr., ad apicem ramosis, septatis, fusco-brunneis, intus nubilosis, 8-15 \times 7-8.

Hab. ad ramos arborum, Andranohinaly Madagascar.

Sect. 3. Didymosporæ.

CALLORIA Fr. — Syll. VIII p. 639, XI p. 427, XIV p. 805, XVI p. 772, XVIII p. 143.

1. *Calloria erythrostigmoides* Rehm, Discom. p. 464. — Ascomatibus 5755 sparsis v. gregariis, hypophyllis, sessilibus, primo globosis clausis, dein circulariter hiascentibus et discum plano-patellatum tenuiter marginatum flavidum v. rubellum ostendentibus, 150-300 μ diam., ceraceo-gelatinosis, siccis contortis et cinnabarinis; excipulo tenui parenchymatico, leviter rubello; ascis clavatis, apice rotundatis, 85-90 \times 10-12, octosporis; sporidiis ellipsoideis v. subfusiformibus, non acutis, rectis, primo continuis, 2-guttulatis, dein bicellularibus, hyalinis, 12-17 \times 5-6, distichis; paraphysibus filiformibus, 1,5-2 μ . cr. sursum furcatis et curvulis.

Hab. in foliis radicalibus siccis *Cerastii alpini* in Carinthia et *Campanulæ Zoysii* in Carniolia.

2. *Calloria hungarica* Rehm, Ann. Mycol. IV (1906) p. 339. — A. 5756
scomatibus dispersis, sessilibus, primitus globoso-clausis, mox patellaribus, disco orbiculari tenuissime marginato, plano, 0,15-0,25 mm. diam., extus glabris, dilute succineis, excipulo parenchymatico subhyalino, siccis, complicatis, subaureis, tremelloideis; ascis clavatis, 60-70 \times 9, 8-sporis, jodo immutatis; sporidiis ellipsoideis, utrinque rotundatis, medio septatis, haud constrictis, hyalinis, 8-9 \times 4, distichis; paraphysibus filiformibus, versus apicem subglobosis, 6 μ . lat., hyalinis.

Hab. in ligno Piri Mali, Starà Skola, Schemnitz Hungariæ (KMET). — *Call. extumescenti* et *Call. austriacæ* proxima sed probe distincta.

3. *Calloria sanguinea* Quél. Champ. Vosg. II, p. 414, t. V, fig. 31. 5757
— Ascomatibus lenticularibus rubro-purpureis, mollibus dein duris et marginatis, 1-2 mm. diam., extus madore flavescentibus; ascis... non descriptis.

Hab. in ramis emortuis quercinis, Jura Gallie.

4. *Calloria coccinea* Syd., Hedwigia XLIX (1909) p. 81. — Asco- 5758
matibus sessilibus e rimis corticis erumpentibus, sparsis vel hinc inde aggregatis, subgelatinosis, irregularibus, $\frac{1}{2}$ -1 mm. longis, immarginatis, coccineis; ascis clavato-cylindraceis, sessilibus, apapophysatis, 50-55 \times 6-7, octosporis; sporidiis oblique monostichis vel

plerumque distichis, oblongo-ellipsoideis, medio 1-septatis non constrictis, primitus hyalinis, tandem dilute fuscidulis, 10-14 \times 3,5-5.

Hab. in ramis Ingæ dulcis, Para America austr. (C. F. BAKER).

5. *Calloria minutula* Bomm. Rouss. Sacc., in Saccardo, Not. Myc. VI, 5759 Ann. Myc. v. III (1906) p. 507. — Dense gregaria, superficialis, obconica dein concaviuscula, glabra, subtremelloidea, 90-200 μ . d., lignicolor; ascis clavatis, 45-60 \times 6, subsessilibus, octosporis; paraphysibus filiformibus, parum distinctis, ascos non superantibus; sporidiis ex ovoideo breve fuscoideis, monostichis, 7-9 \times 4, uniseptatis, sæpe 2-guttulatis, hyalinis.

Hab. in disco truncorum Alni glutinosæ, La Panne, Furnes, in Belgio (MARIA ROUSSEAU).

6. *Calloria carneo-flavida* Rehm, Ann. Myc. v. III (1905) p. 412 et 5760 Ascóm. Exsicc. n. 1611. — Ascomatibus gregariis, in epidermide dealbata vel ligno decorticato sessilibus, primitus globosis, mox disco explanato, orbiculari, tenerrime marginato, interdum convexulo, 120-250 μ . diam., dilute flavidulis vel roseolis, glabris, excipulo parenchymatico subflavido, versus marginem pseudoparenchymatico, siccis carneo-flavidis vel roseis, demum flavescentibus, sæpe tenuiter obscurius marginatis, humidis subtremellosis, siccis vix visibilibus; ascis oblongo-clavatis, apice incrassatis, 45-50 \times 10-12, 8-sporis, poro jodo dilute violaceo tincto; sporidiis oblongis, utrinque rotundatis, rectis, primitus 1-cellularibus, nucleolis apicalibus 2 instructis, demum medio septatis, utraque cellula biguttulata, ad septum haud constrictis, hyalinis, 10-12 \times 3-5, distichis; paraphysibus apice dichotomis, septatis, hyalinis, 2-, ad apicem 3 μ . cr.

Hab. ad caules putrescentes Urticæ dioicæ prope Schlehdorf Alpium bavar. et prope Monachium (Dr. REHM). — Oculo inermi vix visibilis; *Callorice vinosulæ* subaffinis.

7. *Calloria atro-sanguinea* Rehm, Ann. Mycol. V (1907) p. 518. — 5761 Ascomatibus in mycelio explanato *Stereï* parasitico, gregariis, siccis atris, humidis atro-sanguineis, punctiformibus, irregulariter semiglobosis, haud marginatis, excipulo subtus modo conspicuo, pseudoprosenchymatico, rubro-fusco, in epithecium transeunte, 150 μ . diam. vix ultra; ascis clavatis, apice rotundatis, 40-50 \times 10, octosporis, jodo non cærulescentibus; sporidiis ellipsoideis, interdum obtuse clavatis, rectis, hyalinis, medio septatis, haud constrictis, utrinque 2-guttatis, demum 4-cellularibus, 10-12 \times 3-3,5, distichis;

paraphysibus filiformibus, 1 μ ., apice bifurcatis et globulosis 4 μ . crassis, epithecium crassum sanguineum formantibus; hypothecio hyalino.

Hab. ad ligna Coniferarum, Sumner Wash. Amer. bor. (E. T. et S. A. HARPER). — Ob excipulum tantum basilare ad *Aggrium* vergit.

DIDYMCORYNE Sacc. et Trott. (Etym. *didymos* duplex et *Coryne* ob sporidia bilocularia). — A gen. *Coryne* differt sporidiis aequè hyalinis sed tantum bilocularibus. Ad hoc genus quoque ducendae sunt: *Didymocoryne striata* (E. et E.) — Syll. VIII, p. 643 — *D. solitaria* (Rehm) — Syll. X, p. 43 — *D. pallidula* (Rehm) — Syll. l. c. p. 44.

1. *Didymocoryne michailowskoensis* (P. Henn.) Sacc. et Trott., *Co-* 5762
ryne michailowskoensis P. Henn. Hedw. (1905) XLV, p. 30. — Ascomatibus sparsis v. subgregariis, stipitatis, calyciformi-infundibuliformibus, subgelatinosis sicco corneis, olivaceis, extus flavo-viridulis pulverulentis, margine sublobatis v. undulatis, c. 2-3 mm. diam., disco olivaceo, flavo-pruinoso, dein rimoso, stipitibus c. 1-4 mm. longis, 1 mm. cr., concoloribus, saepe confluentibus; ascis clavatis, apice attenuatis obtusiusculis, 8-sporis, 80-100 \times 5; paraphysibus filiformibus, hyalinis, guttulatis, c. 2 μ . cr., apice paullo incrassatis; sporidiis oblongo-cylindraceis, rectis v. curvulis, utrinque obtusis, 2-guttulatis, dein medio 1-septatis, hyalinis, 8-13 \times 2.5-3.

Hab. in ligno putri Michailowskoe Rossiae (J. KONOVALOFF).

Sect. 4. Phragmosporae.

CORYNE Tul. — Syll. VIII p. 641, X p. 43, XI p. 427, XVI p. 773, XVIII p. 143.

1. *Coryne gelatinosa* (Ell. et Mart.) Rehm, Ann Mycol. V (1907) 5768
p. 518. Ita vocanda *Orbilia gelatinosa* (Ell. et Mart.) Sacc. Syll. VIII, p. 624, Cfr. Ell. et Martin sub *Mollisia* (Amer. Nat. 1883, p. 1283). — Ascomatibus in mycelio orbiculari *Meliolae* hyphis tenerrimis hyalinis ramosis oblecto indeque fere sericee cinerello dispersis, sessilibus, primitus globulosis, clausis, dein disco urceolato, demum patellari, tenuiter marginato, versus basim stipitiformiter elongatis, glabris, 0,3-0,5 mm. diam., hyalinis vel dilutissime rosaceis, gelatinosis, siccis rubidulis, fere corneis, excipulo ex

hyphis gelatinosis, candidis, septatis, implexis contexto, crasso; ascis clavatis, apice rotundatis, $50 \times 12-15$, 8-sporis, jodi ope nulla; sporidiis fusiformibus, transverse 3-septatis, haud constrictis, hyalinis, $12-15 \times 5$, distichis; paraphysibus gelatinosis, filiformibus, septatis, $3-3,5 \mu$. cr., ad apicem dilatatae 5μ . cr., curvulis.

Hab. ad folia viva *Perseæ palustris*, Green Cove Springs, Florida (MARTIN). — Genuina *Coryne* nec *Orbilina*.

2. *Coryne foliacea* Bres. in Strasser III, Nachtr. Pilz. Sonntagb. in 5764 Verhandl. zool. bot. Gesell. Wien (1905) p. 611. — Ascomatibus subcartilagineo-gelatinosis, e basi communi oriundis et caespitose congregatis e subturbinato subcylindricis v. foliaceis, demum late expansis, carneo-ochraceis, extus subrugulosis, usque ad 3 cm. latis; hymenio pallide carneolo, undulato-gyroso; ascis subcylindricis, basi tenuato-stipitatis, $100-110 \times 8-10$, jodo poro vix caeruleo-scentibus, paraphysibus $2,5 \mu$. cr., apice haud incrassatis interdum conidiophoris; sporidiis ellipsoideis, biguttulatis, hyalinis, $7-10 \times 4-4,5$; conidiis vix a sporidiis diversis.

Hab. ad truncos *Aceris Pseudoplatani* in Mt. Sancto, Sonntagberg Austriae. — Habitus *Tremellæ foliaceæ*, sed fabrica interior omnino diversa.

3. *Coryne albido-aurantiaca* Starb. (1899) — Syll. XVI, p. 774 — 5765 Hujus speciei videtur status nondum maturus *Ombrophila geralensis* P. Henn. (1899) — Syll. XVI, p. 766.

CHLOROSPLENIELLA Sacc. — Syll. VIII p. 645, XVI p. 774.

1. *Chlorospleniella collematoides* Rehm, Broteria V (1906) p. 227. 5766 — Ascomatibus gregariis, sessilibus, primitus globoso-clausis, dein disco orbiculari, convexiusculo, haud conspicue marginato, dilute fuscidulo, c. 400μ . diam., excipulo versus basim coarctato, brunneo, glabro, ad basim pseudoparenchymatice contextu, siccis nigro-fuscis, disco tenuissime marginato, gelatinosis; ascis clavatis, apice rotundatis, $60-65 \times 8-9$, J +, octosporis; sporidiis fusoides, modice septatis, haud constrictis nec guttatis, rectis, interdum subcurvatis, 10×3 , hyalinis, strato mucoso tenuissimo obductis, distichis; paraphysibus, parvis, filiformibus, hyalinis, $1,5 \mu$. cr.

Hab. ad lignum putridum arboris frondosæ, Brasilia (RICK).

Sect. 5. Dictyosporæ.

HÆMATOMYXA Sacc. — Syll. VIII p. 633, X p. 40.

1. *Hæmatomyxa bambusina* Raciborski, Bull. Ac. Sc. Cracovie (1909) 5767 p. 371. — Hypothallo nullo v. subnullo; ascomatibus nigris, depressis 1-3 mm. latis, 1-1,5 mm. altis confluyendo 5-6 angulosis, raro rotundatis, extus nigro-carbonaceis, intus albis, gelatinosis, hygroskopiceis, pseudoparenchymaticis et prosenchymaticis, demum superficie hinc inde v. undique fertilibus; ascis pulvinatim erumpentibus, elongato-ovoideis, 90-98 \times 20-24, apice rotundatis, octosporis; sporidiis ovoideis rotundato-attenuatis, levibus, hyalinis, 27-30 \times 13-15, muriformi-multilocularibus, medio constrictulis, tenuiter tunicatis.

Hab. ad culmos *Bambusæ* sp., Buitenzorg Java.

Sect. 6. Scolecosporæ.

HOLWAYA Sacc. — Syll. III p. 646, XVI p. 1115.

1. *Holwaya pusilla* Rehm, Ann. Mycol. IV (1906) p. 337. — Asco. 5768 matibus in ligno superficialiter fusco-nigritulo dispersis, sessilibus, primitus subgloboso-clausis, dein patellaribus, tenuissime marginatis, 300 μ . altis et latis, in stipitem brevissimum c. 145 μ . lat. subcylindraceum elongatis, glabris, atris, siccis subverruculosis; excipulo flavo-fusco, hyphis laxè intricatis contexto, subgelatinoso, crasso; ascis cylindraceis, apice rotundatis, 120-130 \times 8-10, octosporis, jodi ope nulla; sporidiis cylindraceo-vermicularibus, apice superiore obtusis, inferiore acutatis, subcurvatis, 1-5-septatis, quaque cellula magniguttata, haud constrictis, hyalinis, 35-38 \times 3-3,5, distichis; paraphysibus filiformibus, 1 μ . cr., ad apicem dichotomis et fuscis, epithecium crassum formantibus.

Hab. ad lignum putridum in silvis, Lyndonville N. Y., Amer. bor. (C. E. FAIRMAN). — *Holwayæ giganteæ* proxima sed multo minor.

Fam. 8. Stictidaceæ Fr.

Sect. 1. Hyalosporæ.

PROPOLIS Fr. — Syll. VIII p. 648, X p. 44, XIV p. 806.

1. **Propolis pirina** Rehm, Contr. mycol. Hung. (Növ. Közl. 1905) p. 3, 5769

Extr. — Ascomatibus gregariis, sub epidermide innatis, eamque hemisphærice protuberantibus, demum laciniis 3-4 disrumpentibus, primitus globoso-clausis, dein disco orbiculari, tenuiter irregulariterque marginato, explanato, hyalino, 0,5 mm. diam., excipulo membranaceo, tenuissimo, fuscidulo, parenchymatico; ascis cylindraceis, apice rotundatis, 120-150 \times 12-15, octosporis, jodi ope nulla; sporidiis fusoides-ellipsoideis, crasse tunicatis, 1-cellularibus, hyalinis, levibus 18-20 \times 8-9, 1-stichis; paraphysibus filiformibus, 2 μ . cr., ad apicem dilutissime flavidulis.

Hab. in cortice Piri Mali, Berencsfalu, prope Selmeczbánya, Hungariæ (KMET). — A genere *Propolis* paraphysibus filiformibus, ab *Ocellaria* item paraphysibus haud ramosis neque epithecium formantibus, ascis Jodi ope diversa, tamen *Propoli fagineæ* structura similis, etsi ascomatibus orbicularibus sporarumque forma dissimilis.

2. **Propolis tetraspora** Sacc. apud Mouton, in Bull. Soc. bot. Belg. 5770

(1887) p. 2, t. I, f. 11, extr. — Ascomatibus dense sparsis, primo epidermide denigrata tectis, dein ea lacerata circumdatis e discoideo oblongis 0,5-1 mm. long., rufo-succineis, carnosulis, immarginatis, planiusculis; ascis subcylindricis in pedicellum longiusculum protractis, tetrasporis, 80-90 \times 10-12; paraphysibus septatis, ramosis, ascos æquantibus; sporidiis monostichis ellipsoideis, inæquilateris, quandoque subreniformibus, 2-guttulatis, granulosisque, hyalinis, 14-20 \times 8-10.

Hab. in caulibus siccis *Solidaginis Virgæ-aureæ*, Chaudfontaine, Dolembreux pr. Liège Belgii. — Ab affinibus ascis tetrasporis potissimum distincta.

NÆVIA Fr. — Syll. VIII p. 658, X p. 45, XI p. 660, XI p. 631, XVI p. 1065, XVIII p. 594.

1. **Nævia pezizelloides** Rehm, Ascom. exsicc. n. 1657 (1906), Ann. 5771

Mycol. IV (1906) p. 405. — Ascomatibus dispersis, primitus sub epidermide innatis eamque perforantibus, demum sessilibus, patellaribus, disco orbiculari plano tenuiter marginato, excipulo glabro, versus basim subangustato, prosenchymatice flavidule contexto, hyalino-flavidulis, c. 300 μ . diam., siccis urceolatis, interdum fuscidule marginatis; ascis clavatis, apice rotundatis, plerumque subcurvatis, 80-85 \times 12-14, octosporis, J -; sporidiis oblongo-clavatis, utrinque rotundatis, unilocularibus, guttulas oleosas includentes, hyalinis, 12-14 \times 4,5-5, distichis; paraphysibus filiformibus, septatis, 2,5 μ . cr., versus apicem 2-3-tomis, apice 4 μ . lat., ibique interdum flavidulis.

Hab. ad folia caulesque putrescentes *Alchemillæ pubescentis* juxta glaciem *Alpeiner Gletscher Stubai Tirolie* (REHM).

2. *Nævia muscarina* Rehm, Contr. mycol. Hung. (Növ. Közl. 1905) 5772 p. 3, Extr. — Ascomatibus sparsis, primitus innatis, dein per epidermidem longitudinaliter fissam prorumpentibus, patellaribus, orbicularibus, tenuissime marginatis, fusco-nigritulis, 0,3-0,4 mm. d., excipulo membranaceo fuscidulo, parenchymatico; ascis clavatis, apice rotundatis, 25-30 \times 5-6, octosporis; poro jodi ope immutato; sporidiis clavatis, 1-cellularibus, hyalinis, 5-6 \times 2,5, distichis; paraphysibus filiformibus, septatis, hyalinis, apice obtusis, 2-3 μ . cr.

Hab. in caule emortuo *Muscari comosi*, *Berencsfalu*, prope *Selmeczbánya*, Hungaria (KMET). — Sporidiorum minutie a descriptis *Næviæ* speciebus diversa.

3. *Nævia seriata* (Lib.) Rehm — Syll. VIII, p. 663 — var. *comedens* 5773 Rehm, Ann. Myc. III (1905) p. 414 et Ascom. Exsicc. n. 1610. — Dignoscitur matricis foliis initio viridibus denique circa ascomata decoloratis et postremo necatis; sporidiis paullo angustioribus, nempe 8-9 \times 1,5-2.

Hab. in foliis *Caricis* sp. inter *Gotzing* et *Thalham* *Bavariæ* superioris.

Sect. 2. Phragmosporæ.

CRYPTODISCUS Corda — Syll. VIII p. 669, XIV p. 809, XVI p. 778.

1. *Cryptodiscus albo-marginatus* Kirschst., Verh. Bot. Ver. Brandb. 5774 XLVIII (1906) pag. 39. — Ascomatibus cortice immersis, hemisphærico-prominentibus 0,5 mm. diam. poro albo-marginato cir-

ulari apertis, disco griseolo; excipulo basi brunneo, supra hyalino, ex hyphis filiformibus septatis constituto; ascis clavatis, supra rotundatis, sessilibus, tenuibus, octosporis, $70-80 \times 16-20$; sporidiis irregulariter pluries seriatis, hyalinis, clavatis, rectis v. curvulis, plerumque 8-septatis, leniter constrictulis, guttulis evanidis, faretis, $32-46 \times 5-6$; paraphysibus filiformibus, hyalinis, ascos longitudine æquantibus, supra non incrassatis, septatis, 2 μ . circ. cr.

Hab. in cortice dejecto Pruni Cerasi, Wegrund pr. Gross-Behnitz, Germania.

2. **Cryptodiscus volvatus** v. Höhnelt, *Ergeb. Bot. Exp. Südbres.* 1901, 5775 Denk. k. Ak. d. Wiss. Wien, Bd. LXVXIII (1907) Extr. p. 30. — Ascomatibus rotundatis, 250-400 μ . latis, immersis margine incrassatis lobato-laciniatis, sparsis, quandoque binis confluentibus; acie sterili 80 μ . lata, 55 μ . cr.; hypothecio plectenchymatico, pallido 40-50 μ . cr.; ascis clavatis $75 \times 5-6$ paraphysibus filiformibus obsitis, octosporis; sporidiis mono- v. distichis, hyalinis, elongato-ellipsoideis, utrinque obtusulis, rectis, 10×3 . J +.

Hab. in fragmento corticis, prope Butantan, Sao Paulo Brasiliæ. — A *Cr. Leprieurii* (Mont.) magnitudine omnium partium minore distinctus dicitur, sed de numero septorum sporarum auctor silet!

3. **Cryptodiscus phaneromycoides** Rehm, *Ascomyc. Exsicc. fasc.* 43, 5776 n. 1802 et *Ann. Mycol.* VII (1909) p. 134. — Ascomatibus gregariis, stipiti haud maculato primitus innatis, globoso-clausis, epidermidem obtegentem conoideo-protrudentibus, stellatim erumpentibus, ab iisque laciniis erectis coronatis discum orbicularem, ex albido roseolum, tenuissime marginatum denudentibus, 0,5-1 mm. diam., ceraceis, excipulo parenchymatice contexto, tenui hyalino, disco sicco albide cinerello; ascis clavatis, apice rotundatis, $70-80 \times 10-12$, 8-sporis, totis jodo cæruleo tinctis; sporidiis clavato-elongatis, rectis, transverse 7-septatis, hyalinis, $18-24 \times 3$, 2-3-stichis; paraphysibus filiformibus, 2 μ . cr., versus apicem subramosum 2,5 μ . cr., hyalinis.

Hab. ad stipitem Filicis cujusdam, Sao Leopoldo, Rio Grande do Sul Brasiliæ (THEISSEN).

PHRAGMONÆVIA Rehm — *Syll.* VIII p. 674, XIV p. 809, XVI p. 779, XVIII p. 148.

1. **Phragmonævia lignicola** Vouaux, *Bull. Soc. Mycol. Fr* (1910) p. 154. 5777 — Ascomatibus in series longitudinales dispositis in macula albe-

scente ligni gregariis, primum hemisphaericis innatisque, postea superficiem ligni findentibus discoque emergentibus, tum plerumque in longitudinem ligni elongatis, atque utrinque attenuatis et acutiusculis, 0,5-1 mm. long., nigris, disco ovali, margine tenui; ascis cylindraceis estipitatis, $100 \approx 10$, octosporis; sporidiis uniseriatis, hyalinis, ellipsoideis, uniseptatis constrictisque, loculo inferiori tenuiori sed vel majori vel minori, $15-18 \approx 5-6$, eguttulatis; paraphysibus filiformibus, paucis, ascis paullo longioribus; Jodi ope nulla.

Hab. in ligno vetusto ignoto, Numéa Nova-Caledonia (Cacot).
Phr. hysteroioidi (Desm.) Rehm affinis, sed differt forma et magnitudine sporidiorum.

XYLOGRAMMA Wallr. — Syll. VIII p. 677, XI p. 429, XIV p. 809, XVIII p. 149.

1. *Xylogramma macrosporum* Kirschst., Verh. Bot. Ver. Brandenb. 5778 XLVIII (1906) p. 40. — Ascomatibus in maculis pallescentibus vel rubidis parce gregariis, primum immersis, dein elongato-vel rotundato-prominentibus, disco pallide brunneo sed extus et margine obscuriore, usque ad 1 mm. long., ceraceis; ascis clavatis, basi in pedicellum tenuatis, supra rotundatis incrassatisque, octosporis, $110-130 \approx 12-16$; sporidiis basi 1- supra 2- v. 3-stichis, hyalinis, plerumque elongato-ellipsoideis v. subcylindraceis, sæpe irregularibus, rectis v. curvulis, 4-6- plerumque 5-septatis, ibique leniter constrictulis, raro imperfecte longitudinaliter uniseptatis, $25-35 \approx 6-7$; paraphysibus 2-3 p. cr., hyalinis, filiformibus, ramosis, septatis, sursum sæpe incurvatis et epithecium efformantibus, rotundatis et quandoque parum incrassatis.

Hab. in caulibus putrescentibus Malvæ Alceæ, Gross-Behntzer Hasellake et Artemisiæ vulgaris, prope Gross-Behnitz, Germania. — *X. caulicolæ* (Fuck.) affine sed sporidiis majoribus et pluri-septatis distinctum.

2. *Xylogramma nigerrimum* (Ell. et Ev.) Rehm, in Ann. mycol. V 5779 (1907) p. 518, *Briardia nigerrima* Ell. et Ev., Bull. South. Calif. Ac. of Sc. IV (1905) p. 62. — Ascomatibus gregariis, 1-4 mm. long., 1 mm. lat., nigris, inter fibras ligni intemperie dealbati erumpentibus; ascis primum subglobosis dein obovato-oblongis, $40 \approx 12-15$, octosporis; sporidiis irregulariter confertis, oblongo-clavatis, hyalinis, dein brunneis, guttulatis, $8-12 \approx 3-4$, continuis; paraphysibus supra ramosis, et epithecium nigrum formantibus

apiceque conidia subglobosa brunnea obsolete muriformi-septata, 6-7 μ . diam., gerentibus.

Hab. in ligno *Rhois laurinae*, Catalina Isl. prope litora Californiæ inf. (C. F. BAKER).

PHANEROMYCES Speg. et Har. — Syll. VIII, p. 677.

1. *Phaneromyces* ? *platensis* Speg., Myc. Arg. IV in An. Mus. Buenos Aires (1909) p. 454, fig. 39. — Ascomatibus innato-erumpentibus, parvis, crasse obtuseque albo-marginatis, 1-2 mm. diam., disco minuto, impresso, glaucescente v. subolivascete, pruinuloso; ascis subellipsoideis dense paraphysatis, deorsum cuneatis brevissime noduloso-pedicellatis, $60 \approx 18$, octosporis, jodo immutatis; paraphysibus filiformibus apice grumoso-coalescentibus; sporidiis clavato-acicularibus, 5-septatis, fasciculatis, arcuatis, deorsum conspicue tenuato-acutis, ad septa non constrictis, hyalinis, circiter $40 \approx 7$ (ex icone).

Hab. ad palos *Prosopidis Algarobillæ* diu intemperiei expositos Los Hornos prope La Plata, Argentina. — Habitus lichenoideus, sed thallus et gonidia nulla.

Sect. 3. Scolecosporæ.

STICTIS Pers. — Syll. VIII p. 647, X p. 44, XI p. 428, XIV p. 806, XVI p. 776, XVIII p. 146.

1. *Stictis chilensis* Speg., Fungi Chilenses (1910) p. 129, cum icon. — Ascomatibus sparsis, innatis, erumpentibus, ore trigono v. tetragono, laciniis 3-4 revolutis latis ornato donatis, disco plano glauco-cinereo, 0,5-1,5 mm. diam.; ascis cylindræis breviter crasseque pedicellatis, 90-100 \approx 8-9 octosporis, paraphysibus filiformibus apice non v. vix uncinatis obvallatis; sporidiis filiformibus dense minuteque guttulatis, hyalinis, 60-80 \approx 1,5-2.

Hab. in foliis coriaceis dejectis siccis *Boldoæ*, *Ætoxicæ*, *Bellotæ*, *Guevinæ* etc. prope Talcahuano, Concepcion, Valparaiso, Chile Amer. austr.

2. *Stictis Arctostaphyli* Ferdinandsen et Winge, Botan. Tidsskr. XXVIII (1907) pag. 253, cum icon., Botan. Tidsskr. XXIX (1908) p. 312, *Coccomyces quadratus* (Sch. et Kze.) Karst. var. *Arctostaphyli* Rehm (nom. nud.) Ann. Mycol. V (1907) p. 251; *Næmacy-*

clus Penegolensis Rehm, Verh. bot. Ver. Prov. Brandenb. (1908) p. 34. — Ascomatibus hypophyllis, maculis pallidis insidentibus, erumpentibus, lobis 3-5 epidermicis circinatis, 0,5-1 mm. diam., circ. 110 μ . cr.; ascis cylindraceo-clavatis, sessilibus, 75-105 \times 9-10; sporidiis filiformibus, hyalinis, juvenilibus, ut videtur, plasmate quadripartito, spurie 3-septatis, maturis plerumque tortis, guttulat, deorsum attenuatis, 60-75 \times 1,5-2; paraphysibus numerosis, filiformibus, guttulatis, circ. 1,5 μ . cr., superne 2-3 ramulis instructis, epithecium debilem formantibus; J-.

Hab. ad folia emortua *Arctostaphyli Uvæ-ursi* pr. *Borris Jutlandia*.

3. *Stictis valdiviensis* Speg., Fungi Chilenses (1910) p. 130. — A. 5788
 scomatibus gregariis innatis, erumpentibus, ore rotundo margine elevatulo minute denticulato candido cinctis, disco carneo infosso, 0,5-1 mm. diam.; ascis linearibus, dense tenuiterque paraphysatis, breviter attenuato-pedicellatis, 150-160 \times 6; sporidiis acicularibus 9-15-septatis, ad septum medium constrictis, hyalinis, 45-55 \times 2-2,5.

Hab. in pedunculis siccis subputrescentibus *Lobeliae Tupæ* prope Ciudad de Valdivia Chile Amer. austr.

4. *Stictis Cydoniæ* Schulz. v. Mügg. in Verhandl. zool.-bot. Gesell. 5784
 Wien (1871) p. 1250, t. XIII, f. 30. — Ascomatibus cortice innatis demum cortice secedente liberis, initio urceolatis, clausis, mox hiascentibus, excipulo nigricante præditis, 115-140 μ . diam.; disco plano pallide brunneo, nucleo candido; paraphysibus dense stipatis, filiformibus, apice gemmulis globulosis, brunneis, 2 μ . diam. terminatis; ascis non visis.

Hab. in ramulis corticatis et demum decorticatis *Cydoniæ vulgaris* in Hungaria. — Species vere dubia.

5. *Stictis friabilis* (Phill. et Pl.) Sacc. et Trav. — Syll. XX, p. 898 5785
 — *Peziza friabilis* Phill. et Plowr. in Grevillea IV (1876) p. 121, t. 62, fig. 2. — Sparsa v. gregaria, sessilis, junior globosa, dein hemisphærica, extus albida, minute pubescens, concava, fragilis; margine fisso, inaequali; ascis cylindraceo-clavatis; sporidiis octonis, filiformibus, 60 \times 1, multiseptatis; paraphysibus gracilibus.

Hab. in ramulis emortuis quercinis inter fibras ligneas in North Wales Britanniae. — Verisimiliter ascomata observata post corticis lapsum.

6. *Stictis fimbriata* Schw. — Syll. VIII, pag. 686 — fm. *silvestris* 5786
 P. Henn., Verh. Bot. Ver. Prov. Brandb. XLVII (1905) p. 219.
 — Ascomatibus sparsis vel gregariis, immersis, convexis, limbo

elevato 5-8 radiato candido furfuraceo cinctis, disco concavo, cinereo-fusco, c. 250-350 μ . diam.; ascis subclavato-fusoideis, apice acutis, octosporis, 70-90 \times 8-10; paraphysibus filiformibus, pluriguttulatis, hyalinis, apice haud incrassatis, 2-3 μ . cr.; sporidiis filiformibus, flexuosis, apice obtusis, inferne subattenuatis, acutiusculis, pluriguttulatis dein 9-12-septatis, hyalino-cyanescentibus, 50-80 \times 2-3.

Hab. in squamis dejectis strobilorum Pini inter Lanke et Utz-dorf Germaniæ.

7. *Stictis tropicalis* Speg., Myc. Arg. IV in An. Mus. Buenos Aires 5787 (1909) p. 455. — Verticaliter cylindræa, profunde infossa, ore minutissimo sæpius 4-dentato, albido dehiscens, 500-600 μ . alta, 100-150 μ . diam.; ascis linearibus prælongis, apice rotundatis deorsum breviter tenuato-pedicellatis, 200-225 \times 12, paraphysibus tenuissimis obvallatis, octosporis; sporidiis asci longitudine multiseptatis, non tortis, 200 \times 3,5-4, articulis non secedentibus, 7-10 μ . longis, hyalinis.

Hab. ad rhachides foliorum delapsorum Musæ paradisiacæ in hortis, Orán, Argentina.

8. *Stictis bambusella* v. Höhnelt, Ergebn. Bot. Exp. Südbras. (1901) 5788 Denk. k. Ak. d. Wiss. Wien LXXXIII (1907) Extr. pag. 30. — Ascomatibus singulis, profunde immersis, rotundatis v. elongatis, circ. 500 μ . long., extus tenuiter albo-marginatis, disco flavido pallido; hypothecio 30-40 μ . crasso, pallido, minute parenchymatico; ascis cylindræis 140-150 \times 7-8, octosporis, paraphysibus filiformibus supra incrassatulis, epithecium indistinctum efformantibus ob-sitis, J +, primum cyaneis dein rubro-vinosis; sporidiis filiformibus, multiseptatis, 70-140 \times 1,7-3,5, articulis 3-6 μ . long. non secedentibus.

Hab. in culmis Bambusæ, ad flumen Rio Pardo in districtu S. Cruz, Sao Paulo Brasilæ.

SCHIZOXYLON Pers. — Syll. VIII p. 697, X p. 47, XI p. 430, XIV p. 812, XVI p. 782, XVIII p. 152.

1. *Schizoxylon græcum* v. Höhnelt, Fragm. z. Myk., Sitzb. k. Ak. d. Wiss. Wien, Bd. CXVI, Abt. I (1907) pag. 638. — Ascomatibus sparsis, primum globoso-immersis, dein rotundato-apertis et discum rubidum v. carneum ostendentibus, 200-1200 μ . latis, 500-600 μ . altis, margine albo, crassiusculo, lobulato præditis; hypothecio hyalino, minute indistincte celluloso-plectenchymatico circ.

60 μ . cr.; excipulo basi 40 μ . cr. saepe oxalati calcici incrustato. tunc 120-130 μ . cr.; ascis paraphysatis, cylindraceis 280-340 \times 8-12, octosporis; sporidiis filiformibus, septatis, 200-250 \times 2-2,5, saepe in eodem asco maturo in 2-5 articulos cylindraceos secedentibus. J -.

Hab. in ramulis putrescentibus Oleæ europææ in ins. Corcyra (Corfu) (EGGERTH).

2. *Schizoxylon melanostictum* Spegazz., Myc. Arg. IV in An. Mus. 5790

Buenos Aires (1909) pag. 456. — Minutum, erumpens, nigricans, laxè gregarium, areis albescentibus insertum, primo globulosum. 120-150 μ . diam. epidermide velatum, disco melleo, ore rotundo angusto dehiscens; ascis linearibus dense tenuissimeque paraphysatis, apice obtuse rotundatis, breviter minute pedicellatis. 200 \times 8-10, octosporis; sporidiis ascorum longitudine cito in globulos minutos 1,5-1,7 μ . diam. secedentibus.

Hab. ad ramos emortuos Lippiæ geminatae, Ensenada pr. La Plata Argentina.

3. *Schizoxylon dermateoides* Rehm, Ann. Mycol. IV (1906) p. 336. 5791

Ascomatibus dispersis, in cortice interiore sessilibus et prorumpentibus, globulosis, clausis, mox pseudopatellaribus, poro minutissimo pertusis, demum patellaribus apertis, disco tenuiter marginato, orbiculari, cinerescens, plano, extus glabris, excipulo crasso parenchymatico, totis pruina alba tectis, 0,5-1,5 mm. diam., ceraceis; ascis cylindraceis, versus apicem subacutatis, 2-4-sporis, 200 \times 12; sporidiis filiformibus, septatis, asci longitudine, parallele positae, intra ascum cellulis singulis oblongis hyalinis, 7-8 \times 3-4 μ . secessis; paraphysibus filiformibus, hyalinis, 1,5 μ . cr., ad apicem conglutinatis et epithecium crassum, viridi-fusculum, jodi ope cœruleo-tinctum formantibus.

Hab. in truncis emortuis Salicis in silvis, Lyndonville N. Y. Amer. bor. (C. E. FAIRMAN). — *Schizoxylon argentino* forte affine.

4. *Schizoxylon gigas* Spegazz., Myc. Arg. IV in Anal. Mus. Buenos 5792

Aires (1909) p. 456. — Maximum, superficiale, lenticulari-orbiculare, margine crasso obtuso albo discoque convexo olivaceo præditum, initio glauco-pruinose serius nudum, 2-3 mm. diam., 1,5 mm. crass., extus fuscum; ascis linearibus apice acutiuscule tenuatis, 250-500 \times 10, octosporis, breviter crasseque pedicellatis; sporidiis fasciculatis filiformibus mox in articulos cylindraceos rectos, 10-25 μ . longos secedentibus, 2 μ . cr., hyalinis.

Hab. ad lignum putrescens in hortis pr. La Plata Argentina. — Affine *Schiz. ceruginoso* sed sat distinctum.

NEMACYCLUS Fuck. — Syll. VIII p. 701, X p. 47, XI p. 431.

1. **Nemacyclus Lamberti** Rehm in Strasser, Verh. k. k. zool.-bot. Ges. 5793 Wien LX (1910) p. 466. — Ascomatibus gregariis, cortice immutato innatis, globosis, epidermidem sensim semiglobose protuberantibus, dein perforantibus discumque flavidum orbicularem, suburceolatum, epidermidis laciniis 4-5 coronatum denudantibus, 0,5-2 mm. diam.; excipulo membranaceo, parenchymatico, flavidulo; ascis cylindraceo-clavatis, obtusis, $90-95 \approx 12$, 8-sporis, jodo immutatis; sporidiis acicularibus, apice superiore obtusis, inferiore acutatis, rectis v. subflexuosis, 12-cellularibus, hyalinis, $40-60 \approx 3$, distichis; paraphysibus filiformibus, apice obtusis, 2-2,5 μ . crassis, hyalinis.

Hab. ad ramulum *Lonicera*, Ybbsitz Austria inf. (P. LAMBERT).

2. **Nemacyclus caulium** v. Höhn., Sitzb. k. Ak. d. Wiss. Wien, CXV, 5794 Abt. I (1906) p. 650. — Ascomatibus gregariis, primum clausis et immersis, dein corticem postremum infuscatum inflantibus et laciniatim erumpentibus nec non discum suborbicularem vel inæqualiter angulosum $\frac{1}{3}-\frac{1}{2}$ mm. long. et $\frac{1}{3}-\frac{2}{3}$ lat. ostendentibus; ascis clavatis apice obtuso-rotundatis deorsum valde tenuatis, $52 \approx 10$, octosporis; sporidiis filiformibus parallelis utrinque obtusulis octocellularibus, 8-12-guttulatis, $36-52 \approx 1,6-2,5$; articulis 4-5 μ . long.; paraphysibus copiosissimis, filiformibus, sursum ramosis et epithecium tenue hyalinum formantibus; hypothecio ex cellulis 3-6 μ . lat., supra hyalino infra flavido; excipulo nullo.

Hab. in caulibus emortuis *Urticæ* dioicæ, Wiesenbachtal in Austria inf. — *Nemacyclo flavo* affinis.

Sect. 4. Dictyosporæ.

PLEIOSTICTIS Rehm — Syll. VIII p. 703, XI p. 431.

1. **Pleiostictis Ilcis** v. Höhn., Fragm. z. Myk. VIII (1909) in Stzb. 5795 K. Ak. d. Wiss. Wien CXVIII, Abt. I, p. 1227. — Ascomatibus sparsis, immersis, primum elongatis, dein rotundatis, udis 500-800 μ . longis, sed sæpe etiam minoribus, primum immersis clausis, demum supra lobulato- v. irregulariter lacerato-apertis et discum nigrum ostendentibus; stratu hymeniali 120-130 μ . cr., hypothecio tenui, pallido; excipulo basi vix evoluto pallido, ceterum nigro-olivaceo, minute parenchymatico, carbonaceo-coriaceo; ascis

paraphysatis, clavatis, sessilibus vel breviter angustatis, bis-octosporis, 125×16 ; sporidiis ellipsoideo-ovoideis, $16-40 \times 7-15$, septis transversis 4-12 longitudinalibus 1-3, diu hyalinis, demum olivaceis.

Hab. in ligno Ilicis Aquifolii, Almbachklamm pr. Berchtesgaden in Bavaria (REHM). — *Pl. propolioidi* Rehm affinis.

Fam. 9. Phacidiaceæ Fr.

Sect. 1. Hyalosporæ.

PSEUDORHYTISMA Juel — Syll. XIV p. 33.

1. **Pseudorhytisma Myrtacearum** Rick, Broteria V (1906) p. 38. — 5796

Stromate orbiculari, amphigeno, atro, sæpe pulvinato, rugoso, 3-5 mm. diam., punctato, denique fisso, rhytismoideo, disco albido; ascis usque ad 190×20 , breviter pedicellatis, cylindraceis, apice incrassatis, octosporis; sporidiis uniseriatis, oblongis, sed apicibus abrupte acutatis, $20-30 \times 10-15$, guttulatis, unicellularibus; paraphysibus filiformibus, hyalinis, dilutioribus.

Hab. in foliis Myrtaceæ cujusdam, Rio Grande do Sul Brasiliæ. — Socia *Melasmia Myrtacearum* Henn. quæ probabiliter statum pycnidicum sistit.

PHACIDIUM Fr. — Syll. VIII p. 709, X p. 48, XI p. 431, XIV p. 813, XVI p. 783, XVIII p. 156.

1. **Phacidium Aquifolii** (DC.) Schmidt et Kunze, Mykol. Hefte I, p. 34, 5797

t. II, fig. 13, Rehm Discom. p. 68, *Xyloma Aquifolii* DC. Mém. Mus. III, p. 324, t. 3. — Ascomatibus gregariis, innatis, foliorum epidermidem griseam dein nigricantem bullatim elevantibus, demum vertice in 4 lacinias æquales hiascentibus et discum rotundum pallidum ostendentibus, 0,5 mm. diam.; ascis clavatis, apice obtuse acutatis jodoque tinctis, octosporis, $75-90 \times 18-20$; sporidiis ex oblongo ovoideis v. subfusoides, continuis, eguttatis, hyalinis, $17-20 \times 6-8$, distichis; paraphysibus tenuibus apice ramulosis et subincrassatis brunneolis.

Hab. in pag. super. foliorum Ilicis Aquifolii in Gallia, Germania, Italia.

2. **Phacidium Marantaceæ** P. Henn., in Flore du Bas- et Moy-Con- 5798

go, Ann. Mus. du Congo, v. II fasc. II (1907) pag. 100. — Ascomatibus innato-superficialibus, gregarie sparsis, nervos subsequentibus, carbonaceo-atris, rotundato-pulvinatis, substellate v. longitudinaliter rimosis, 1-2 mm. diam.; ascis clavatis (plerumque immaturis) 8-sporis, 80-90 \times 13-18; sporidiis subdistichis, continuis, hyalinis, 12-18 \times 5-6.

Hab. in foliis Marantaceæ, Kisanu Congo, Africa trop. (VANDERYST).

3. *Phacidium diminuens* Karst. — Syll. VIII, p. 721 — var. *tetra-* 5799
sporum Rehm, in Jaap Beitr. Pilzfl. d. Schw., Ann. Myc. v. V
(1907) p. 251 (*Nævia*). — Distinguitur ascis tetrasporis.

Hab. in culmis vetustis Eriophori (Trichospori) cæspitosi supra Grimselospitze Helvetiæ.

4. *Phacidium coopertum* (Desm.) von Höhnelt, Österr. Bot. Ztschr. 5800
LVIII (1907) p. 324. — Ita vocanda *Sphæria cooperta* Desm. seu
Læstadia cooperta (Desm.) Sacc. Syll. I, p. 426, teste v. Höhnelt. l. c.

PSEUDOPEZIZA Fuck. — Syll. VIII p. 723, XI p. 431, XIV p. 813,
XVI p. 784, XVIII p. 156.

1. *Pseudopeziza repanda* (Fr.) Karst. — Syll. VIII, p. 727 — var. 5801
Thalictri P. Henn., Engl. Jahrb. XXXVII (1905) p. 162. (*Phacid.*
repand.). — Maculis effusis, fuscis, ascomatibus epiphyllis sparsis,
subhæmisphæricis, atris, lobato-rimosis, c. 300-400 μ . diam.; ascis
clavatis, obtusis, octosporis, 50-55 \times 7; sporidiis distichis, oblonge
ellipsoideis, rectis v. curvulis, obtusis, 2-guttulatis, 7-10 \times 3-3.5,
hyalinis.

Hab. in foliis vivis *Thalictri simplicis*, Tokyo Horjnoushi,
Japonia (MIYABE). — A typo differt sporidiis latioribus, non cla-
vatis sed ellipsoideis.

2. *Pseudopeziza Ribis* Rehm apud Klebahn, Centralbl. f. Bakt., II 5802
Abt., XV (1905) p. 336. — Ascomatibus erumpentibus breviter et
crasse pedicellatis supra applanatis et circ. 230 μ . latis; ascis cla-
vatis 80-100 \times 18-20; sporidiis ovoideis 12-17 \times 7-8; paraphysibus
filiformibus, ramosis, apice vix incrassatis.

Hab. in foliis siccis *Ribis rubri*, *R. aurei*, Germania. —
Est status ascophorus *Glæosporii Ribis* (Lib.) Mont. et Desm. —
Cl. Klebahn in Zeitschr. f. Pflanzenkr. XVI (1906) p. 82 pro hac
specie constituit gen. *Drepanopeziza*.

3. *Pseudopeziza Jaapii* Rehm, Ascom. exsicc. n. 1727, Ann. Mycol. 5803
V (1907) p. 465. — Ascomatibus in hypophyllo late testaceo tin-

cto plerumque arcte congregatis, maculis fusco-brunneis v. nigrescentibus innatis, semiglobose prominentibus, clausis, dein urceolatis, disco orbiculari subhyalino, tenuiter marginato. excipulo glabro, fuscidulo, cum folii cellulis arcte connato, versus marginem cellulis elongatis contexto, 0,2-0,3 mm. diam.; ascis fuscoideis, lata basi sessilibus, versus apicem acutatis subincrassatisque, octosporis, $50-60 \approx 14$; poro jodo dilute tincto; sporidiis oblongis, saepe subcurvatis, interdum apice superiore obtusis, inferiore acutatis. 1-cellularibus, hyalinis, $25 \approx 2,5$, parallele in asci lumine positae; paraphysibus filiformibus, 1,5 μ ., versus apicem 2-4 μ . cr., hyalinis.

Hab. ad folia putrida Pruni Padi, Triglitz, Prignitz, Germania (JAAP).

4. **Pseudopeziza Loti** Boud., Icon. Mycol. t. III, tab. 562 (1907). Hist. 5804 et Classif. Discomyc. Europe (1907) p. 179. — Erumpens, minuta, sessilis, extus nigricans, margine denticulato, hymenio cinerescente 0,20-0,30 mm. lato; ascis oblongo-clavatis, octosporis, foramine immarginato, $50 \approx 8$, ad basim non attenuatis; paraphysibus cylindratis, simplicibus aut parce divisis, vix septatis. ad apicem rarius incrassatis, 2-4 μ . cr.; sporidiis albis, oblongo-clavatis, ad apicem intus granulosis, $12-14 \approx 2,5-3$.

Hab. in caulibus emortuis Loti majoris, Montmorency Gallia. — A *Ps. Trifolii* et *Ps. Medicaginis* differt præcipue sporidiis non guttulatis et matrice diversa.

5. **Pseudopeziza subcalycella** Rehm, Ann. Mycol. VII (1909) p. 541. 5805 — Ascomatibus in maculis orbicularibus creberrimis, crasse fusco-cinctis, demum papyraceo-albidulis, 1,5-2 mm. diam. 1-2) plerumque in hypophyllo innatis, dein prorumpentibus et sessilibus, primitus globoso-clausis, dein disco orbiculari explanato dilute roseolo, sicco vitellino, margine tenuissimo albidulo cincto, versus basim constrictis, excipulo albescente, glabro, parenchymatice crasse contexto; ascis clavatis, apice rotundatis, usque ad $100 \approx 8-9$, octosporis, jodi ope nulla; sporidiis ellipsoideis, unicellularibus, hyalinis, 2-guttulatis, $8-9 \approx 4$, monostichis; paraphysibus filiformibus, 2,5, ad apicem usque ad 3 μ . cr., hyalinis.

Hab. ad Miconiæ folia, Sao Leopoldo, Rio Grande do Sul Brasilæ (THEISSEN S. J.).

6. **Pseudopeziza Salicis** (Tul.?) A. Potebnia, Ann. Mycol. (1910) p. 79. 5806 An *Trochila Salicis* Tul. — Ascomatibus sparsis, subhemisphaericis erumpentibus, parte basali conica folio immersis, 170 μ . altis, superne 140 μ . lat., excipulo atro-brunneo cinctis; hypothecii con-

textu pseudoparenchymatico ab illo subhymeniali prosenchymatico distincto; ascis clavatis, $60-70 \times 14$, octosporis; paraphysibus filiformibus, simplicibus v. furcatis,asco paullo longioribus, $75-85 \times 2$; sporidiis ovoideis, biguttulatis, monostichis, $13-14 \times 5,5-6$.

Hab. in foliis hibernatis Salicis albæ, socio *Glæosporio Salicis*, cujus est status ascophorus, in Germania (JAAP).

7. *Pseudopeziza Vleugelii* Rehm, in litt. Jan. 1912. — Ascomatibus 5807 in hypophyllo late fuscato gregariis, innatis dein emergentibus, orbicularibus, siccis concavis, pallidioribus; disco plano vel convexulo, haud conspicue marginato, rufo-ferrugineo, $100-200 \mu$. diam., excipulo tenuissimo parenchymatico; ascis cylindraceutis, apice rotundatis, $70-80 \times 10-13$, bisporis, jodo immutatis; sporidiis oblongis utrinque rotundatis, haud guttatis, 1-cellularibus, hyalinis, $15-17 \times 8-10$, monostichis; paraphysibus filiformibus, septatis, hyalinis, 2 μ . cr., ad apicem $2,5 \mu$. cr.

Hab. ad folia putrida Salicis nigricantis, Umea Sueciæ bor. (VLEUGEL). — A *Pseud. versicolori* (Wahlbg.) Rostr. et *Pseud. Salicis* A. Potebn. imprimis ascis bisporis dignoscenda.

TROCHILA Fr. — Syll. VIII p. 728, X p. 49, XIV p. 814, XVI p. 785, XVIII p. 158.

1. *Trochila ? chilensis* Speg., Fungi Chilenses (1910) pag. 130. — 5808 Ascomatibus sæpius epiphyllis innatis, epidermide nigrificata decidua tectis, disco nigris, $0,5-1,5$ mm. diam.; ascis subclavulatis antice subacutiuscule rotundatis, postice leniter sensimque attenuato-pedicellatis, $70-80 \times 8-9$, octosporis, paraphysibus filiformibus apice non v. vix subincrassatulis cinctis; sporidiis e fusoidesubnavicularibus utrinque subacutiusculis atque minute uniguttulatis, parvis, hyalinis, oblique monostichis, $14-15 \times 4$.

Hab. in foliis dejectis Lardizabalæ biternatæ, Cerro Caracol de Concepcion, Chile, Amer. austr.

2. *Trochila Perseæ* Speg., Fungi Chilenses (1910) p. 131, cum icon. 5809 — Ascomatibus sparsis amphigenis, orbicularibus parvis, epidermide nigrificata serius sæpius cruciatim disrupta tectis, disco plano fusco; ascis clavulatis apice obtusissimis, postice longiuscule attenuato-pedicellatis, $50-60 \times 10$, parce paraphysatis, tunica jodi ope perdilute cærulescente; sporidiis distichis e cylindraceuto subellipsoideis, subnavicularibus, utrinque obtusis, parvis, hyalinis, $9-10 \times 3$.

Hab. in foliis dejectis subputrescentibus Perseæ Lingue prope Ciudad de Valdivia Chile, Amer. austr.

3. *Trochila leopoldina* Rehm, Ann. Mycol. VII (1909) pag. 539. — 5810

— Ascomatibus hypophyllis, gregariis, innatis, primitus globoso-clausis, nigro-tectis, dein emergentibus, disco extus tenuiter laciniato, orbiculari, hyalino, explanato, 0,3-0,4 mm. diam., siccis nigris; ascis clavatis, apice rotundatis, 45-50 \approx 7, octosporis; sporidiis clavatis, unicellularibus, biguttatis, hyalinis, 8-9 \approx 3, distichis; paraphysibus filiformibus, hyalinis, 1,5 μ . cr., versus apicem 2 μ . cr.; excipulo fusco, cellulis permagnis parenchymatice contexto; hymenio dilutissime flavidulo.

Hab. in foliis *Nectandræ rigidæ*, Sao Leopoldo Rio Grande do Sul Brasilæ (THEISSEN S. J.).

STEGIA Fr. — Syll. VIII p. 733, XIV p. 814, XVIII p. 157.

1. *Stegia subvelata* Rehm — Syll. VIII, pag. 734 — fm. *juncicola* 5811

Rehm ap. Jaap in Abh. bot. Ver. Prov. Brandenb. II (1907) p. 13.

Hab. in calamis *Junci Jacquinii*, Passo della Furca, 2430 m. alt. Helvetia. — A typo vix, nisi matrice, differt.

BONANSEJA Saccardo, Microm. Americani novi, Journ. of Myc. v. XII (1906) p. 50 (Etym. a cl. doct. SYLVIO BONANSEA fungi detectore).

— Ascomata epidermide tecta, dein erumpenti-subsuperficialia, disciformia, ceracea (brunnea), disco mox aperto, applanato; excipulo brevissimo obsolete prosenchymatico. Asci cylindricei, paraphysati, octospori. Sporidia sphaeroidea, hyalina, nucleata, dein brunnea. — Gen. *Stictophacidio* Rehm affine sed præcipue sporidiis globosis distinguendum. Est quasi *Pseudopeziza* sphaero-phæospora.

1. *Bonanseja mexicana* Saccardo, l. c. pag. 51. — Ascomatibus epi- 5812

phyllis, secus nervos seriatis et interdum confluentibus, rimose erumpentibus et epidermide bullata exalbata tectis v. cinctis, disciformi-applanatis, 400-600 μ . diam., tenuissime marginatis, ambitu circulari-angulosis, umbrinis, ceraceis; ascis cylindraceutis rarius cylindrico-clavulatis, 100 \approx 8 vel 100 \approx 11 (si clavulatis deorsum sensim tenuatis, parte sporif. 50-60 μ . longa, apice obtusis, octosporis; paraphysibus bacillaribus, hyalinis, 2-3 μ . cr., continuis, simplicibus; sporidiis typice monostichis, rarius subdistichis, globosis, 7-8 μ . diam., initio hyalinis, dein brunneis, 1- raro 2-nucleatis, levibus.

Hab. in foliis languidis v. emortuis *Anonæ Cherimoliæ*, Tenancingo, Mexico. — Excipulum tenuissimum rufo-melleum, granulis crystallinis copiosis asperulatum.

Sect. 3. Didymosporæ.

ABROTHALLUS De Not. — Syll. VIII p. 739, XVIII p. 161.

1. **Abrothallus Parmeliarum** (Sommf.) Nyl. — Syll. VIII, p. 739 — 5813
var. *dothideæformis* (Fekl. in herb. sub *Abrothallus*) Rehm, Ann. Mycol. V (1907) p. 535. — Ascomatibus in superficie thalli orbiculariter vel striæformiter usque ad 1 cm. longi, convexe tumidis, demum maculatim denigratis, arcte congregatis, innatis, per rimas reticulatas nigras prorumpentibus, ca. 150 μ . diam.; ascis cylindraceis, apice rotundatis, $80 \approx 9$, octosporis, jodi ope nulla; sporidiis subclavatis, utrinque obtusis, medio septatis et subconstrictis, utraque cellula guttam magnam oleosam includente, cellula superiore latiore, subfuscis, $12 \approx 5-6$, monostichis; paraphysibus arcte conglutinatis, hyalinis.

Hab. in thallo *Peltigeræ caninæ*, Budenheim, Germania (FUCKEL in herb. BOISSIER).

2. **Abrothallus Moorei** Lindsay, Observ. on new Lichen. Microfungi 5814 (1869) p. 546, t. 24, f. 18-21. — Ascomatibus . . . ; ascis (ex icone) tereti-clavatis apice rotundatis, deorsum sensim et breviter tenuato-stipitatis, octosporis; sporidiis monostichis oblongis continuis (?), hyalinis (?) dein 1-septatis, brunneis.

Hab. in thallo *Cladoniæ bellidifloræ*, Kelly's Green Hibernia (Ireland) *Verrucariæ Taylori*, Verr. fusiformis et *Graphidis scriptæ* in Britannia. — Descriptio l. c. desideratur et species videtur perdubia.

3. **Abrothallus cærulescens** Kotte, Centralbl. f. Bakter. etc. II Abt. 5815 XXIV Bd. (1909) pag. 86, tab. III, fig. 31. — Mycelio jodi ope cyaneo tincto; sporidiis $13-15,6 \approx 4,9-5,9$.

Hab. in *Parmelia conspersa* in Germania.

4. **Abrothallus Curreyi** Lindsay, Lich. and Fgi. Otago p. 409, t. 29, 5816 fig. 1-5. — Syll. XIX, p. 1. — Ascomatibus scutellato-disciformibus rufo-brunneis pallide marginatis; ascis clavatis, $30 \approx 15$, breve stipitatis, paraphysibus clavatis sursum atro-brunneis, stipatis obvallatis; sporidiis ellipsoideis v. suboblongis, $7-8 \approx 5-6$, hyalinis, utrinque obtusis, medio sæpe constrictulis et verisimiliter demum 1-septatis et brunneis.

Hab. parasitice in thallo *Parmeliæ perforatæ* ad truncos et ramos arborum in Nova Zelandia.

5. **Abrothallus Glabratulæ** Kotte, Centralbl. f. Bakter. etc. II Abt. 5317 XXIV Bd. (1909) pag. 80, tab. III, fig. 25. — Mycelio jodii ope azureo tincto; sporidiis 10,9-13,1 \approx 4,6-5,2; conidiis 5,4-6,5 \approx 3,9-4,4.

Hab. in *Parmelia glabratula* in Tirolia merid. et Bavaria.

6. **Abrothallus Peyritschii** (Stein) Kotte, Centralbl. f. Bakter. etc. II 5318 Abt. XXIV Bd. (1909) p. 76, tab. I, fig. 1-24, *Abrothallus Parmeliarum* var. *Peyritschii* Stein 1879. — Mycelio jodii ope cyaneo tincto; sporidiis 10,4-13 \approx 4,6-5,9; conidiis 5,2-6,7 \approx 3,9-5,2.

Hab. in thallo *Cetrariæ caperatæ*, Austria et Tirolia meridionali.

7. **Abrothallus Cetrariæ** Kotte, Centralbl. f. Bakter. etc. II. Abt. 5319 XXIV Bd. (1909) p. 82, fig. 1 et tab. III, fig. 26-28. — Verrucas seu gallas efformans; mycelio jodi ope nulla; sporidiis 12,4-13,7 \approx 3,9-6,2; conidiis 4,9-6,5 \approx 3,9-4,9.

KEITHIA Sacc. — Syll. X, p. 49.

1. **Keithia tetraspora** (Phillips) Sacc. — Sacc. Syll. X, p. 50. — Hue 5320 ducenda est, præeunte cl. Patouillard, *Didymascella Oxycedri* Maire et Sacc. — Syll. XVIII, p. 162 — Confer R. Maire in Bull. trim. Soc. Myc. de France (1905) p. 140. — Genus *Didymascella* Maire et Sacc. est inde delendum. Species habitat in Juniperis in Britannia et Corsica.

FABRÆA Sacc. — Syll. VIII p. 735, X p. 50, XIV p. 815, XVIII p. 160.

1. **Fabræa Crantziæ** Speg., Myc. Arg. IV in An. Mus. Buenos Aires 5321 (1909) p. 457, fig. 40. — Innato-erumpens, laxè gregaria, rufescens glabra, minuta, orbicularis, infra convexula, supra applanata, margine integerrima, 150-200 μ . diam., subcoriacea; ascis subclavulatis, aparthysatis, apice acutiuscule subrotundatis, crassiuscule tunicatis, 50 \approx 12; sporidiis elliptico-biconicis, diblastis, hyalinis, ad septum non constrictis, 16 \approx 5, lenissime inæquilateris.

Hab. ad folia viva *Crantziæ* lineatæ in inundatis, Canadon, Gostra, Chubut, Patagonia reip. Argentinae.

PHÆOFABRÆA Rehm, Ann. Mycol. VII (1909) p. 541 (Etyim. *phaeos* obscurus et *Fabræa*). — Sporidiis subfuscis a *Fabræa* imprimis distinguuntur.

1. **Phæofabræa Miconiæ** Rehm, l. c. — Ascomatibus in maculis epiphyllis granulato-convexis, suborbicularibus, fusciscentibus 1-4 mm.

diam., in hypophyllo demum subfuscis, hypophyllis, erumpentibus, plerumque 2-4 aggregatis, rarius dispersis, primitus globoso-clausis, dein suburceolatis, tenuissime marginatis, demum patellaribus, disco fuscidulo crasse marginato, 0,3-0,5 mm. diam., denique sessilibus; excipulo ab initio albescente, dein fusco, glabro, sicco atro, corrugato, crasso; ascis clavatis, apice rotundatis, 90-100 \times 10, octosporis, jodi ope nulla; sporidiis oblongis, utrinque rotundatis, subfuscis, septo medio hyalino, utraque cellula guttam oleosam magnam includente, 1(-2)-stichis; paraphysibus filiformibus, 2 μ ., versus apicem 4 μ . cr. et subfuscis, epithecium formantibus.

Hab. ad folia Miconiæ, Sao Leopoldo Rio Grande do Sul Brasiliæ (THEISSEN S. J.).

Sect. 3. Scolecosporeæ.

RHYTISMA Fr. — Syll. VIII p. 752, X p. 51, XI p. 433, XIV p. 817, XVI p. 790, XVIII p. 164.

1. *Rhytisma acerinum* (Pers.) Fr. — Syll. VIII, p. 753 — var. *australe* Sacc. in Ann. Mycol. (1911) p. 250. — A typo differt ascomatibus in circulum magis regularem et minus confertim dispositis, paullo majoribus, 3 \times 1,5 mm., opace nigricantibus, non nitidis (ob epidermidis matricis naturam); fructificatione eadem.

Hab. in foliis languidis Aceris obtusifolii, Mondoulla ins. Cypri (J. HOLMBOE, comm. G. LAGERHEIM).

2. *Rhytisma ? Lagerstroemiæ* P. Henn., Hedwigia XLVII (1908) p. 262. — Stromatibus innatis, rotundatis v. effusis, epiphyllis, atris, rimosis (immaturis visis).

Hab. in foliis Lagerstroemiæ speciosæ, Luzon, Prov. Bataan, Lamao ins. Philipp. (COPELAND).

3. *Rhytisma ? Viburni* P. Henn., Hedwigia XLVII (1908) p. 262. — Stromatibus amphigenis, atris, bullatis, rotundatis (immaturis observatis).

Hab. in foliis [Viburni?], Luzon, Prov. Benguet, Mt. Tuglon ins. Philippin. (MERRILL).

4. *Rhytisma Padi* Rabenh. in Kl. Herb. viv. n. 761 et 1953 (nomen nudum).

Hab. in foliis Pruni Padi in Germania.

5. *Rhytisma Ulmi* Engelh. Abhandl. Senckenb. nat. Ges. XXIX (1908).

Hab. in pliocæne super. in Germania.

COCCOMYCES De Not. — Syll. VIII p. 744, X p. 51, XI p. 432, XIV p. 818, XVI p. 789, XVIII p. 164.

1. **Coccomyces Yerbæ** Speg., An. Mus. Nac. Buenos Aires t. XVII 5828 (1908) p. 132. — Maculis suborbicularibus subdefinitis 3-10 mm. diam.; ascomatibus in maculis laxè gregariis ex orbiculari subquadratis 150-200 μ . diam., stellatim dehiscentibus; ascis fusoides brevissime pedicellatis, supra crassiuscule tunicatis, 50 \approx 5-6, paraphysibus filiformibus simplicibus apice vix incrassatulis, plus minusve subuncinatis commixtis, octosporis; sporidiis acicularibus 40 \approx 1, minute multi-guttulatis, hyalinis.

Hab. ad folia dejecta subputrescentia *Illicis* paraguayensis prope San Pedro Argentinae Amer. austr.

2. **Coccomyces Boydii** A. L. Smith, Trans. Brit. Mycol. Soc. 1907, 5829 v. III (1908) p. 39. — Sparsus, suborbicularis, subdepressus, innato-emergens et per corticem rotundatim dehiscentem emergens, disco pallido v. carneo-flavido, subnitido, 1-3 mm. lat.; ascis cylindraceo-clavatis, apice attenuatis, 90-115 \approx 8; sporidiis filiformibus, multi-guttulatis v. obsolete multi-septatis, hyalinis, circ. 50-55 \approx 1; paraphysibus numerosis, filiformibus, simplicibus, apicem versus flexuosis, quam ascis longioribus, omnino hyalinis, 1,5-2 μ . latis.

Hab. ad corticem *Myricæ* Gales, Killin Perthshire, Britannia (D. A. BOYD). — *C. triangulari* affinis sed differt ascis et paraphysibus angustioribus, sporidiis brevioribus etc.

3. **Coccomyces pampeanus** Speg. — Syll. XVIII, p. 818 — var. *chilensis* Speg., Fungi Chilenses (1910) p. 132, cum icon. — A typo recedit ascis sporidiisque paullo longioribus crassioribusque (ascis 80 \approx 12-14; sporidiis 50-55 \approx 2-2,5).

Hab. in foliis emortuis siccis *Eryngii* paniculati, Cerro Caracol de Concepcion, Chile Amer. austr.

4. **Coccomyces dentatus** (Kze. et Sch.) Sacc. — Syll. VIII, p. 745 5831 — var. *Lauri* Rehm in Theiss. Beih. Bot. Centralbl. Bd. XXVII (1910) Abt. II, pag. 406. — Ascomatibus hypophyllis 0,6-1 mm. diam., cruciatis v. 3-5-lobulatis; ascis 65-90 \approx 9-11, basi longe attenuatis, supra subcuneatis; sporidiis 50-62 \approx 2.

Hab. in foliis siccis Lauracæ cujusdam, Rio Grande do Sul Brasilie.

5. **Coccomyces quadratus** (Schm. et Kunze) Karst. — Syll. VIII, 5832 p. 746 — var. *Arctostaphyli* Rehm, in Jaap Beitr. Pilzfl. d. Schw. Ann. Myc. v. V (1907) p. 251. — (Nomen nudum),

Hab. in pag. inf. foliorum *Arctostaphyli Uvæ-ursi*, M. Schynningen Platte, 1975 m. alt. et M. Sempione (Simplonspitz) 2020 m. alt.

6. *Coccomyces Villæ-Viçosa* Torrend. Bull. Soc. portugaise Sc. nat. 5833

III, 1 (1909) p. 7 (extr.). — Ascomatibus primum immersis, atris, rotundis, dein erumpentibus, excipulo irregulariter et laciniatim rupto, carbonaceo, crasso, atro, 0,5-1 mm. diam.; disco griseo-pallido; ascis clavatis, 140-170 \times 6-10, deorsum attenuatis, apice rotundatis, paraphysibus filiformibus, apice vix incrassatis; sporidiis linearibus, 70-80 \times 1,5-2, sursum attenuatis, ibique vix 1 μ . cr., primum irregulariter guttulatis, dein 7-8-septatis, interdum curvulis v. arcuatis.

Hab. in ligno pineo; Villa Viçosa Lusitaniæ. — Affinis *Cocc. Pini*, a quo differt sporidiis angustioribus, ascis majoribus et ascomatibus minoribus.

7. *Coccomyces Bromeliacearum* Theiss., Beih. Bot. Centralbl. Bd. 5834

XXVII (1910) Abt. II, p. 407. — Ascomatibus tectis, rectangularibus, rarius quadratis v. pentagonis, pulvinato-pyramidatis, acutius costatis, nigerrimis, nitentibus, margine strömatico nigro subundulato cinctis, c. 1 mm. diam. v. 1-1,2 \times 0,6-0,8 mm., cruciatim vel 5-laciniatim dehiscentibus, disco griseo; ascis cylindraneo-clavatis, breviter pedicellatis, supra rotundatis v. leniter angustato-conoideis, p. sp. 78-90 \times 8-11, paraphysibus dilutis, dense constipatis, apice non incrassatis, 2-2,5 μ . cr. obvallatis; sporidiis filiformibus, hyalinis (v. lenissime flavidulis) parallelis, guttulatis, 60-75 \times 1,5.

Hab. in utraque parte foliorum basalium aridorum *Bromeliaceæ* cujusdam epiphytæ, Sao Leopoldo, Rio Grande do Sul Brasilæ (J. Rick).

CLITHRIS Fr. — Syll. II p. 803, IX p. 1027 (*Colpoma*), XVIII p. 165.

1. *Clithris Graphis* Rehm Ann. Mycol. VII (1909) p. 533. — Ascoma- 5835

tibus gregariis, epidermide haud mutata primitus innatis, dein ab ea marginatis erumpentibus, demum sessilibus, linearibus, rectis v. vario modo subcurvatis, utrinque acutatis, plerumque arcte congregatis, transverse in ramulo sitis, nigris, scabris, 0,5-5 mm. longis, 0,4-0,5 mm. latis, rima angusta lineari apertis, labiis elongato-rugosis, paullulum distantibus, haud carbonaceis; ascis clavatis, apice rotundatis, 80-85 \times 9, octosporis; sporidiis acicularibus, rectis, non v. indistincte septatis, hyalinis, 30-33 \times 1,2, parallele positis;

paraphysibus filiformibus, apice circinato-flexuosis, hyalinis, 1.5 μ . crassis.

Hab. ad ramum corticatum Pini balsamæ, S. Juan Island Wash. Amer. bor. (E. T. et S. A. HARPER). — *Clithri crispæ* proxima.

Sect. 4. Dictyosporæ.

DOTHIORA Fr. — Syll. VIII p. 764, XVI p. 790.

1. **Dothiora Salicis** Vleugel, Svensk Botanisk Tidskr. Bd. II (1908) 5836 pag. 374, fig. 3, *a*, *b*. — Ascomatibus gregariis, primo in cortice immersis, sphaeroideis, clausis, dein per rimam longitudinalem vel lacinias 3-4 prorumpentibus, atque laciniiis circumdatis, applanatis, nigris; ascis clavatis 80-140 \times 12-20; sporidiis hyalinis, 5-7-loculatis, clavato-fusoideis, in medio paullum constrictis, oculis singulis septo longitudinali divisus, 26-29 \times 6,5-8.

Hab. in cortice Salicis sp., Umea Sueciæ.

Fam. 10. Patellariaceæ Fr.

Sect. 5. Hyalosporæ.

PATINELLA Sacc. — Syll. VIII p. 769, X p. 52, XI p. 433, XIV p. 818, XVI p. 791, XVIII p. 165.

1. **Patinella californica** Rehm, Ann. Mycol. VII (1909) p. 534. — 5837 Ascomatibus gregariis, primitus innatis, clausis, dein emergentibus, demum fere sessilibus, oblongis, vario modo contortis, disco plus minusve applanato et orbiculari, distincte marginato, atris, 0,2-0,8 mm. diam., excipulo subfusco, glabro, parenchymatice crasse contexto, siccis corrugatis; ascis clavatis, apice rotundatis, 60-65 \times 7-8, 8-sporis jodo immutatis; sporidiis ellipsoideis, 1-cellularibus, biguttulatis, hyalinis, 7-8 \times 2,5-3, distichis; paraphysibus filiformibus, ad apicem dichotomis, usque ad 5 μ . crassis et fusciculis, epithecium formantibus; hypothecio fuscidulo.

Hab. in ramis Adenostomatis fasciculati emortuis, Mounts prope Claremont California Amer. bor. (C. F. BAKER). — *P. flexellæ* proxima.

2. *Patinella tryblidioides* Rehm, Ann. Mycol. V (1907) pag. 534. — 5838

Ascomatibus dispersis, erumpentibus, dein sessilibus, patellaribus, primitus clausis, crasse marginatis, nigris, glabris, 0,3-0,5 mm. d., coriaceis; ascis clavatis, apice rotundatis, 70-75 \times 14-15, octosporis, jodi ope totis ærulescentibus; sporidiis ovoideis, 1-cellularibus, guttulis oleosis repletis, hyalinis, 12 \times 7, 1-stichis; paraphysibus apice dichotomis et incrassatis, septatis, epithecium chalybeo-cæruleum formantibus; hypothecio subhyalino.

Hab. ad ramulum exsiccatum Juniperi in valle Venna alpium tridentinarum prope Brennerum, ca. 1800 m. (Dr. REHM). — Ab affini *Pat. atro-viridi* dignoscitur ascomatis colore et ascis sporidiisque multo amplioribus.

PSEUDOPHACIDIUM Karst. — Syll. VIII p. 776, XIV p. 818, XVI p. 791, XVIII p. 169.1. *Pseudophacidium Smithianum* Boudier, Trans. Brit. Mycol. Soc. 5839

1908 v. III (1909) p. 81, tab. IV. — Minutum 0,30-0,31 mm. latum, primo endophyllum dein erumpens demumque liberum, subturbulatum, extus nigrum, glabrum, marginatum. margine primo dentato, intus cum hymenio olivaceum; paraphysibus simplicibus, tenuibus ad apicem vix incrassatis non v. ad summam basim divisis; ascis subcylindræcis, inferne paululatim attenuatis, inoperculatis, octosporis, 160-170 \times 20; sporidiis ellipsoideis, apicibus obtusis, levibus, rectis v. leniter curvulis, primo guttulis oleosis 1-2 p. cr. cum aliis minutissimis numerosis repletis, dein eguttulatis, 17-19 \times 10-12, hyalinis v. pallidis.

Hab. ad folia Empetri nigri, Kilbirnie Ayrshire (D. A. BOWN) et Loch Alsh Rosshire (G. L. SMITH) Britannia.

PLACOGRAPHA Th. Fr. — Syll. XVIII p. 167.1. *Placographa mexicana* Rehm, Ann. Mycol. IV (1906) p. 337. — 5840

Ascomatibus primitus immersis, dein emergentibus, demum sessilibus, globoso-clausis, mox urceolatis, disco oblongo vel plerumque orbiculari, crasse irregulariter verrucoso-marginato, hyalino-flavido, demum interdum gyroso-plicatis, extus verruculosus, nigro-fuscis, 0,5-1,5 mm. diam., siccis plicatis vel corrugatis, ceraceis, excipulo crasso subfusco parenchymatico; ascis clavatis, apice rotundatis. 60-70 \times 8, jodi ope nulla, octosporis; sporidiis oblongis, rectis, utrinque obtusis, 1-cellularibus, hyalinis, 8-10 \times 3-3,5, distichis in superiore asci parte; paraphysibus filiformibus, septatis,

1,5 μ . cr., ad apicem multoties ramosis, 2 μ . cr., sordide flavidulis, epithecium crassum formantibus; hypothecio fuscidulo.

Hab. ad lignum putridum, New-Mexico Amer. bor. (SEAYER).

— Habitus fere cenangioides; ad *Patinellam* tamen vergit.

ROBERTOMYCES Starb., Ascom. Schwed. Chaco-Cordill. Exped., Arkiv. f. Bot., Bd. V (1905) pag. 5 (Etym. in honorem Doctorum ROB. et ROB. junioris FRIES). — Ascomata erumpentia, patellariacea, orbicularia, convexa, textura fuligineo-atrata, coriaceo-carbonacea, in juvenibus stratu superficiali textura erecta parallela prosenchymatica pallidiore. Asci in hoc stratu gignuntur; inter ascos evolutos restant reliquæ contextus prosenchymatici in epithecium globuloso-cellulosum, fuligineo-nigrum transeuntes. Sporidia hyalina, continua. Paraphyses nulke. — Genus quoad locum in systemate dubium.

1. **Robertomyces mirabilis** Starb., l. c. p. 5, fig. 4 a-c. — Ascomati- 5841
bus gregariis, sæpe nonnullis confertis vel fere confluentibus, sessilibus, erumpentibus, peridermio relaxato irregulariter, orbiculariter, polygone vel elliptice determinatis, junioribus cinereo-albidis, tumidule nigro-marginatis, $\frac{1}{2}$ -1 mm. diam., demum crassioribus, totis nigris, usque ad 2 mm. diam.; contextu hypothecii parenchymatico coriaceo, partis parietalis excipuli densissime carbonaceo, partis hymenialis (ubi asci oriuntur), porrecto-prosenchymatico, cellulis minutis, pallidis; ascis octosporis, ellipsoideo-elongatis vel late cylindraceis, sursum primo valde incrassatis, sessilibus, 101-127 \times 23-25; sporidiis hyalinis continuis, conglobatis vel distichis, ellipsoideis, sæpe inæquilateralibus, 28-32 \times 12-14; paraphysibus nullis; jodi ope ascis non cærulescentibus.

Hab. in ligno emortuo, Salta circa 100 m. supra oppidum et Jujuy, Santa Clara in ramulis aridis, in Argentina; in ramulis siccis Gourlieæ decorticatis (Papilionaceæ), Tarija et Soururo inter Tarija et Gran Chaco in Bolivia.

Sect. 2. Phæosporæ.

LAGERHEIMA Sacc. — Syll. X p. 55.

1. **Lagerheima pilosa** Syd., in De Wildem., Fl. Bas-Moy. Congo t. III, 5842 fasc. I (1909) Extr. p. 19. — Ascomatibus superficialibus, sparsis v. paucis aggregatis, planis, marginatis, sessilibus, atris, patellatis,

2-5 mm. latis, extus ad marginem rufo-brunneis et pilis rigidulis usque ad 250 μ . longis, 6-14 μ . cr. continuis, fuscis dense vestitis; ascis cylindraceis, 70-90 \times 4-6, octosporis; sporidiis monostichis, ellipsoideis, continuis, obscure olivaceo-fuscis, 9-12 \times 4-5; paraphysibus copiosissimis, coalescentibus, asco longioribus, sursum usque ad 6 μ . incrassatis, flavis et epithecium efformantibus.

Hab. in ligno decorticato putri, Kisantu Congo, Afric. trop. (VANDERNYST).

Sect. 3. Didymosporæ.

PATELLEA Fr. — Syll. VIII p. 783, XIV p. 820, XVIII p. 173.

1. *Patellea karschioides* Kirschst., Verh. Bot. Ver. Brandb. XLVIII 5843 (1906) p. 40. — Ascomatibus sparse gregariis, nigris, orbicularibus acute marginatis, basi in pedicellum brevem crassiusculum tenuatis, usque ad 1 mm. diam.; ascis cylindraceo-clavatis in pedicellum brevem crassum angustatis, supra rotundatis, 38-48 \times 5-6, octosporis; sporidiis oblique monostichis v. distichis, ovoideis, hyalinis, retis 4-6 \times 2-3; paraphysibus hyalinis filiformibus, continuis, supra globoso-incrassatis et summo apice obscure brunneis, 4 μ . cr., epithecium efformantibus; hypothecio brunneo.

Hab. in ligno udo pineo, Gebhardtshof prope Rathenow Germaniæ. — A ceteris speciebus forma paraphysium et minutie sporidiorum distincta.

KARSCHIA Körb. — Syll. VIII p. 729, X p. 56, XI p. 434, XIV p. 820, XVI p. 792, XVIII p. 176.

1. *Karschia Elasticæ* Koord., Botan. Untersuch. (1907) pag. 162. — 5844 Ascomatibus superficialibus, sessilibus, plano-patellatis, coriaceo-carbonaceis, atris, $\frac{1}{2}$ mm. diam., levibus; ascis clavatis, apice haud incrassatis, 3-8-sporis, paraphysatis, 33-35 \times 8,5-9; sporidiis 1-2-distichis, oblongis v. ovoideo-oblongis, 1-septatis, pallide fuscis, ad septum lenissime constrictis, 10-13,5 \times 3,5-5; paraphysibus simplicibus crassis in massam gelatinosam pallide flavescens coalitis, apice incrassatis.

Hab. in cortice Fici elasticæ prope Karang-gajam prov. Kedu Java (KOORDERS).

Sect. 4. Phragmosporæ.

PATELLARIA Wahlenberg — Syll. VIII p. 786, X p. 61, XI p. 434, XVI p. 795, XVIII p. 179.

1. **Patellaria Theobromatis** d' Almeida et da Camara, Bol. Socied. Bro- 5845
teriana v. XXV (1908-1909) p. 240. — Ascomatibus sparsis, convexiusculis, nigricantibus, coriaceis, erumpenti-superficialibus, sessilibus, tenui-marginatis; ascis immaturis distincte claviformibus, maturis v. siccis subcylindræis, valde paraphysatis, octosporis. 70-80 \times 10-17; sporidiis distichis, leviter clavulatis, griseis v. luteo-brunneis, quinque-septatis, non v. vix constrictis, 16-20 \times 5-7.
Hab. in cortice Theobromatis Cacao, in ins. St. Thomæ.

LECANIDION Rabenh. — Syll. VIII p. 795, X p. 60, XIV p. 821. XVI p. 796, XVIII p. 183.

1. **Lecanidion antarcticum** Speg. — Syll. VIII p. 798 — var. *durel-* 5846
loides Speg., Fungi Chilenses (1910) pag. 132. — A typo recedit ascomatibus in sicco, subhysterioides v. corrugatis; ascis sporidiisque paullo majoribus (asci 80-90 \times 18; sporidia 30-45 \times 6-9).
Hab. in ramis emortuis Lobeliæ salicifoliæ, Cerro Alegre de Valparaiso Chile Amer. austr.

2. **Lecanidion Henningsii** (Ran.) Sacc. et Trott., *Patellaria Henningsii* 5847
Ranojevic, Ann. Mycol. VIII (1910) p. 354, fig. 19-21. — Ascomatibus crebre distributis, primum immersis hysterioides dein patentibus, demum superficialibus . . . ; ascis cylindræis, clavatis, breviter pedicellatis, apice rotundatis, crasse tunicatis, 76-144 \times 10-13,5, octosporis; sporidiis distichis, clavato-elongatis, fusoides, rectis v. curvulis, 3-9- vulgo 5-7-septatis, 26-46 \times 5-7, hyalinis; paraphysibus septatis, supra furcatis et epithecium crassum brunneo-virescens efformantibus, 1-1,5 μ . cr.; hypothecio hyalino v. brunneo.

Hab. in caulibus siccis Verbasci phlomoidis prope Belgrad Serbiæ. — A *Lec. Verbasci* bene distinctum.

3. **Lecanidion submacrosporum** (Rehm) Sacc. et Trott., *Patellaria sub-* 5848
macrospora Rehm, Ann. Mycol. V (1907) p. 535. — Ascomatibus dispersis, primitus innatis et globoso-clausis, dein sessilibus, patellaribus, distincte marginatis, orbicularibus, nigris, glabris, 0,3-0,4 mm. diam., coriaceis; ascis clavatis, apice rotundatis, 100 \times 14, octosporis, jodi ope nulla; sporidiis ellipsoideis, utrinque acutatis, re-

etis, transverse 3-septatis, hyalinis, strato mucoso 4 μ . cr. obdu-
ctis, 15-18 \times 6-7, distichis; paraphysibus dichotome ramosis, 2 μ .
cr., ad apicem flavidulis; hypothecio subfusco; excipulo crasso,
fusco, parenchymatico.

Hab. ad ramulum Juniperi in valle Venna montis Brenner
alpium Tridentinarum ca. 1800 m. (Dr. REHM). — *Lec. macrosporo*
affine, sed sporidia tantum 4-cellularia.

4. *Lecanidion paulistanum* Speg., Fungi in Paul. Rev. Mus. La Plata 5849
t. XV, p. 31. — Maculis nullis; ascomatibus patellaribus sessili-
bus dorso convexulis, nigris, disco planiusculo impressis, margine
angusto acutiusculo calloso cinctis, intus albis, coriaceis, 0,5-1,5
 \times 0,25-0,75 mm.; ascis e cylindraceo subclavulatis, apice subtrun-
cato-rotundatis, postice attenuatis atque in pedicellum breviu-
sculum productis, 99-100 \times 12-14, jodi ope leniter cærulescentibus;
paraphysibus filiformibus paullo longioribus apice fusco-coalescen-
tibus densis obvallatis; sporidiis rectis v. leniter curvulis utrinque
obtusè acutatis 16-20 \times 4-6 triseptatis, ad septa constrictulis, loculis
grosse uni-guttulatis, hyalinis.

Hab. ad ramulos emortuos arbusculæ ignatæ cujusdam, *Spiranga*
Brasilia (USTERT).

STILBOPEZIZA Speg., Anal. Mus. Nac. Buenos Aires t. XVII (1908)
p. 131 (Etym. *Stilbum* et *Peziza*). — Cenangioidea, erumpens, mi-
nuta, caespitosa, cupulis atris, cum strato conidiophoro Phæostilbum
sistente commixtis. Asci fusioidei, paraphysati; sporidia octona fu-
soidea multiseptata, hyalina.

1. *Stilbopeziza Yerbæ* Speg., l. c. pag. 131, cum icon. — Stipitibus 5850
conidiophoris basi confluentibus atque subcylindraceis sursum ap-
planatis, crispulis v. subramulosis 0,5-2,5 mm. alt., 0,15-0,25 mm.
diam., atris subcarbonaceis fibroso-parenchymaticis sterilibus; asco-
matibus constipatis sessilibus obsolete subiculigeris, hypothecio con-
vexo sessilibus, epithecio concolori planiusculo margine acutiusculo
nigro; ascis fusioideis sursum obtusis tunica percrassa vestitis, bre-
viter pedicellatis, octosporis, 100-110 \times 12-14; sporidiis oblique di-
stichis elongato-ellipsoideis utrinque acutiusculis, 28-32 \times 5-6, leni-
ter inaequilateralibus primo 10-12-blastis, serius 9-11-septulatis,
ad septa non constrictis.

Hab. ad ramos dejectos putrescentes *Ilicis* paraguariensis
in silvis secus rivulum Matto Queimado Rep. Argentinae Amer.
austr.

LEPTOPEZIZA Rostr. — Syll. VIII p. 794 (ut subgen.).

1. *Leptopeziza mindanaoensis* P. Henn., Hedw. XLVII (1908) p. 262. 5851

— Ascomatibus superficialibus singularibus, rotundato-discoideis, marginatis, atris, 1,5-2 mm. diam.; disco levi, atro; ascis fusoido-clavatis, apice attenuatis, obtuso-rotundatis, 130-150 × 20-30, 8-sporis; paraphysibus superantibus, ramosis, septatis, hyalinis, 2 μ. cr. apice coalitis, fusciculis; sporidiis subdistichis, oblonge fusoides, utrinque acutis v. obtusiusculis, 5-7-septatis, fuscis, 50-60 × 10-12.

Hab. in Corticio ad ramos emortuos, Mindanao, Davao, Mt. Apo ins. Philippin. (COPELAND).

*Sect. 5. Dictyosporæ.***BLITRYDIUM** De Not. — Syll. VIII p. 802, XI p. 435, XIV p. 823, XVIII p. 185.

1. *Blitrydium Mate* Spegazz., Anal. Mus. Nac. Buenos Aires t. XVII 5852

(1908) pag. 132. — Ascomatibus cupulatis, margine obtusis 90 μ. diam., epithecio carnosulo olivaceo concaviusculo, contextu minute indistincteque subprosenchymatico, matrici dealbata leniter insculptis; ascis apice subtruncato-rotundatis basi abrupte rotundatis vix pedicellatis, 35-40 × 8-10, octosporis, paraphysibus filiformibus longioribus obvallatis; sporidiis didymis ellipsoideo-subbiconoideis, non v. obsoletissime subclavulatis, 3-septatis, ad septum medium sat constrictulis, loculis mediis longitudinaliter divisis, hyalinis, loculis primo guttulatis dein granulosi, 12-14 × 5-6.

Hab. ad ramos decorticatos emortuos Ilicis paraguayensis circa San Pedro Rep. Argentina Amer. austr.

PLEIOPATELLA Rehm, Ann. Mycol. VI (1908) p. 314 (Etym. *pleios*

plenior et *Patella*). — Ascomata sessilia, primitus clausa, dein urceolata, demum disco orbiculari plano patellari, crasse marginato, in stipitem crassum brevissimum elongata, atra, ceracea, hypothecio subfusco. Asci cylindracei, 1-spori. Sporidia oblongo-cylindracea, multoties longitudinaliter et transverse septata, hyalina. Paraphyses filiformes, versus apicem subfuscae et epithecium formantes. Hymenium jodi ope tinctum. — Ab affinibus *Pleiostrictide* et *Pleiostricta* recedit imprimis ascomatibus sessilibus, non erumpentibus etc.

1. **Pleiopatella Harperi** Rehm, Ann. Mycol. VI (1908) pag. 315. — 5858

Ascomatibus dispersis, haud perspicue erumpentibus, sessilibus, primitus globoso-clausis, dein urceolatis, disco demum patellari, orbiculari, crasse marginato, atris, 0,5-1,2 mm. diam., extus glabris, in stipitem crassum brevissimum elongatis, excipulo crasso parenchymatico fusco; ascis cylindraceis, apice rotundatis, c. 90×25 , monosporis; sporidiis oblongo-cylindraceis, utrinque rotundatis, multoties transverse et horizontaliter septatis, hyalinis, $70-80 \times 18-22$; paraphysibus subconglutinis, 0,3 μ . cr., versus apicem septatis et subfuscis, 5 μ . cr., cellulis ultimis 7-8 μ . long.; hypothecio fusco, hymenio jodi ope cæruleo tincto.

Hab. ad corticem Cupressi sp.? (*Cedar*), Longmires Springs Washington Amer. bor. (E. T. et S. A. HARPER).

TRYBLIDARIA Sacc. — Syll. VIII p. 805, XIV p. 33, XVIII p. 186.

1. **Tryblidaria argentinensis** Spegazz., An. Mus. Nac. Buenos Aires 5854

t. XIX (1909) p. 439. — Ascomatibus superficialibus primo hysteroideis dein patellari-apertis medio rimosis, margine elevatis aterrimis 0,5-2 mm. diam.; ascis linearibus basi pedicello crasso nodulosoque suffultis, $90-100 \times 12-14$, octosporis, paraphysatis; sporidiis oblique monostichis ex ellipsoideo lenissime obovatis, $16-18 \times 8-9$, sæpius 3- rarius 4-5-septatis, ad septa leniter constrictulis, loculo centrali supero septo altero verticali fere semper diviso, pallide olivaceis.

Hab. ad truncos decorticatos vetustos *Prosopidum* pr. Alto Grande, San Luis, Rep. Argentina America austr.

2. **Tryblidaria Garryæ** (Earle) Sacc. et Trott., *Tryblidium Garryæ* 5855

Earle, Bull. of the N. Y. Bot. Gard. (1904) p. 290. — Ascomatibus sparsis, subsuperficialibus, nigris, rugosis, patellatis, margine obscuris, 1 mm. circ. lat., 0,25 mm. cr.; ascis clavatis, longe stipitatis, circ. 120×8 ; paraphysibus filiformibus, supra ramosis; sporidiis subdistichis, primum 1-4-septatis et hyalinis, demum obscure brunneis, 10- v. ultra septatis, septis longitudinalibus etiam numerosis, plerumque curvulis, circ. 35×14 .

Hab. in ramis decorticatis *Garryæ* prope Stanford Univ. California Amer. bor. (C. F. BAKER).

3. **Tryblidaria patagonica** Spegazz., An. Mus. Nac. Buenos Aires 5856

t. XIX (1909) p. 440. — Peritheciis sparsis v. laxe gregariis primum hysteroideis mox patellari-apertis, nigris, parvis; ascis linearibus basi breviter crasseque pedicellatis $90-100 \times 10-20$, paraphy-

sibus apice ramosulis commixtis, octosporis; sporidiis ellipsoideis, sæpius distichis, $20-30 \times 7-10$, typice 24×8 , transverse 5- longitudinaliter 1-septatis, olivaceis.

Hab. ad caudices aridos Verbenæ lignosæ ejusdam in Puerto San Antonio, Patagonia, America austr. — Cum *Tr. argentiniensi* notis plurimis ad *Patellariam* vergit, perithecorum juvenilium tamen fabrica ad interim huc inscribuntur. *T. subsidua* (C. et E.) Sacc. secundum descriptiones affines.

4. **Tryblidaria violascens** Rehm, Ann. Mycol. V (1907) pag. 532. — 5857

Ascomatibus gregariis, primitus cortici albi lulo innatis, dein emergentibus, ab eoque crasse, demum rimose marginatis, orbicularibus, planis, disco atro, $0,3-1$ mm. diam.; ascis clavatis, apice rotundatis, crasse tunicatis, ca. 150×40 , bisporis; sporidiis oblongo-ellipsoideis, utrinque rotundatis, rectis, transverse ca. 23, longitudinaliter pluries septatis, inde dense muriformibus, primitus hyalinis, dein violaceis, $60-80 \times 25$, parallele positis; paraphysibus filiformibus, septatis, $1,5 \mu$., versus apicem subramosis, 3μ . cr. epithecium violaceum formantibus; hypothecio cum excipulo crasso flavo-fuscidulo, gonidiis nullis; jodi ope hymenio haud mutato, episporio vero obscurius tincto.

Hab. ad ramulum, Sao Paulo Brasiliæ (USTERI). — Cum *Tr. megalospora* et *Bombyliospora pachycarpa* (lichene) affinitate quadam devincitur.

5. **Tryblidaria roseo-atra** von Höhnelt, Stzb. k. Ak. d. Wiss. Wien, 5858

CXVIII, Abt. I (1909) pag. 347. — Ascomatibus erumpentibus demum superficialibus, primum nigris dein discum roseo-carneum ostendentibus, subtus rugulosis supra convexiusculis, $0,5-1$ mm. latis, plerumque in massas crustaceas usque ad 5 mm. latas gregarie diffluentibus; epithecio bistratoso; hypothecio $360-400 \mu$. cr. minute parenchymatico; ascis clavatis sessilibus, octosporis, supra rotundatis, $84-93 \times 18-24$; sporidiis distichis, hyalinis, tenuiter tunicatis, rectis v. curvulis variabilibus, plerumque elongato-fusoides apice obtusis v. rotundatis, transverse 5-7 longitudinaliter interrupte septatis, ad septa non constrictis, $26-31 \times 8-9$; paraphysibus indistincte filiformibus epithecio adnatis. J-.

Hab. ad basim ed in vaginis Sacchari Soltwedelii, Buitenzorg in ins. Java (RACIBORSKI).

Fam. 11. Caliciaceæ FR.

RÆSLERIA Thüm. et Pass. — Syll. VIII p. 826, XI p. 439.

1. *Ræsleria pallida* (Pers.) Sacc. — Syll. VIII, p. 826 — var. *fari-nacea* (Chev.) Sacc. et Trav. — Syll. XX, pag. 697 — *Coniocybe farinacea* Nyl. Syn. Lichen. pag. 163, t. V, f. 42. — Stipitibus firmioribus nigricantibus, capitulis majoribus albis differt a typo.

Hab. ad truncos vetustos Ulmorum et Æsculorum in regione Parisiensi et in Germania.

2. *Ræsleria Bubonis* (Rostr.) Sacc. et Trott., *Pilacre Bubonis* Rostr., 5860 Fungi Groenl. orient. in Meddel. om Groenl. XXX (1904) p. 114. — Stromatibus gregariis, stipitato-capitatis, albidis, 5-6 mm. altis, 1-2 mm. crassis; capitulo disciformi-depresso, levi, fusco; sporidiis ellipsoideis, 1-guttulatis, hyalinis, 5-6 \times 4.

Hab. in pilulis rejectis Strigum, Kap Dalton, Groenlandia.

ACOLIUM Ach. — Syll. VIII p. 839.

1. *Acolium sessile* (Pers.) Rehm, Krypt. Fl. III, p. 398 et p. 386, 5861 cum icon., *Acolium stigonellum* (Ach.) De Not. — Syll. VIII, p. 839. — *Calicium sessile* Pers. Tentam. disp. fung. suppl. pag. 59. — Ascomatibus gregariis sessilibus, primo globosis, clausis, disco rotundo plano-scutellato, tenui, saepe albido-marginato, denique convexo et immarginato, asperulo præditis, deorsum leviter tenuatis, 0,3-1,2 mm. diam., nigris, subcorneis; ascis primo fusoides, tenuibus, breviter stipitatis, 45 \times 8-9, dein cylindraceis et facile dilatantibus, 90 \times 9, quadri-octosporis; sporidiis ellipsoideis, constricto-didymis, grosse 2-guttatis, primo hyalinis, dein atro-brunneis, 12-15 \times 6-7, submonostichis; paraphysibus filiformibus, demum brunneolis.

Hab. ad thallum *Pertusariæ amaræ*, *P. communis*, *P. coccoidis*, *P. ceuthocarpæ*, rarius aliorum lichenum, ad cortices quercinos, pineos, fagineos etc. in Germania, Suecia, Helvetia.

Fam. 12. Arthoniaceæ REHM.

LECIDEOPSIS Almq. — Syll. X p. 76.

1. *Lecideopsis californica* Rehm, Ann. Mycol. VII (1909) p. 534. — 5862

Ascomatibus in cortice late dealbato dispersis, sessilibus, orbicularibus, subconvexulis, nigro-fuscis, 0,1-0,2 mm. diam., haud marginatis neque excipulo cinctis, siccis planis; ascis ovoideis, apice incrassatis, 30-35 \times 15, 8-sporis; sporidiis oblongo-clavatis, medio subconstrictis, utrinque obtusis, guttulis minutissimis repletis, hyalinis, 12-15 \times 5; paraphysibus conglutinatis, apice incrassatis, epithecium fusco-cæruleum formantibus; hypothecio hyalino sine gonidiis; jodii ope hymenio cæruleo-tincto.

Hab. ad caules emortuos *Baccharidis* vimineæ in montibus prope Claremont Calif. Amer. bor. (C. F. BAKER). — *L. galactiti* proxima.

2. *Lecideopsis* ? *cæruleo-atra* von Höhnelt, Fragm. Myk. VII (1909) 5363

in Sitzb. k. Ak. d. Wiss. Wien, CXVIII, Abt. I, pag. 880. — Ascomatibus immarginatis, nigro-opacis, hemisphaericis, superficialibus, 200-350 μ . lat., circ. 120 μ . cr., concentricè subcæspitosis v. gregariis, sæpe concretescentibus; excipulo nullo; contextu cartilagineo-gelatinoso, nigro-cyaneo; ascomatibus plectenchymaticis; hypothecio nigro-cyaneo usque ad 40 μ . cr., minute parenchymatico; paraphysibus radiatim dispositis simplicibus v. ramosulis, 4-5 μ . latis, distincte septatis, supra epithecium tenuem nigrum efformantibus; ascis octosporis, ex ovoideo subglobosis, basi in pedicellum filiformem 20-30 μ . long. abrupte contractis, crasse tunicatis, 50-60 \times 28; sporidiis conglobatis, bilocularibus, e hyalino lenissime brunneolis, elongato-ellipsoideis, ad septum vix constrictis, apice rotundatis, contentu granuloso, tenuiter tunicatis, extus mucosulis, 20-24 \times 7-8.

Hab. in cortice levi arborum, prope Buituba Sao Paulo Brasilæ (WETTSTEIN et SCHIFFNER).

ARTHONIA Ach. — Syll. X p. 77.

1. *Arthonia punctiformis* Ach. — Syll. X, pag. 77 — var. *populina* 5864

(Mass.) Sacc. et Trav. — Syll. XX, pag. 1189, — *Arthonia populina* Mass., Ric. Lich. crust. pag. 50, fig. 91; Jatta Mon. Lich.

it. Merid. tab. VII, fig. 25. — Ascis 3-5-sporis; sporidiis quadriocularibus $15 \approx 3,6$.

Hab. in truncis et ramis Populi tremulæ in agro Veronensi Ital. sup.

ARTHOTHELIUM Mass. — Syll. X p. 77.

1. *Arthothelium atro-purpureum* Starb., Ascom. Regn. Exped. I, p. 9, 5865 t. I, f. 10, extr. — Ascomatibus in ligno dealbato laxè gregariis, primo immersis, dein erumpentibus, pulvinulatis, orbicularibus v. subellipticis, 0,3-0,5 mm. diam., 100-200 μ . alt., disco pulveraceo atro-purpureo v. subinde olivascente; ascis obpiriformibus, breviter noduloso-pedicellatis, apice rotundatis, crasse tunicatis, 50-63 \approx 30-35, octosporis, paraphysibus conglutinatis superne septatis obvallatis; sporidiis conglobatis oblongis utrinque obtuse rotundatis, 21-25 \approx 9-11, transverse 6-8-septatis, non constrictis, septis nonnullis longitrorsum partitis, hyalinis.

Hab. in ligno vetusto ad oppidum Bahia Brasilæ. — Gonidia nulla.

2. *Arthothelium laricinum* Rehm, in Jaap Ann. Mycol. VI (1908) 5866 p. 207 (nomen nudum).

Hab. in ramis emortuis Laricis deciduæ prope St. Ulrich Austriæ.

Fam. 13. Exoascaceæ SADEB.

EXOASCUS Fuck. — Syll. VIII p. 816, X p. 69, XI p. 435, XIV p. 823, XVI p. 803, XVIII p. 196.

1. *Exoascus nikkoensis* (Kus.) Sacc. et Trott., *Taphrina nikkoensis* 5867 Kus., Bot. Mag. Tokyo XXI (1907) p. 65, cum icon. — Mycelio subcuticulari plerumque hypophyllo; ascis cylindræis v. leniter clavatis, apice rotundatis vel subtruncatis, 40-50 \approx 10-13, cellulis basilaribus rotundatis, 10-15 \approx 10-13, tunica tenuiori præditis; sporidiis globosis v. ellipsoideis, plerumque 8 in quoque asco, 5 μ . d. v. 7 \approx 4-5.

Hab. in foliis bullatis Aceris purpurascentis, prope Nikko prov. Shimozuke Japonia.

2. *Exoascus Æsculi* (Ell. et Ev.) Flora Patterson, North Amer. pa. 5868 ras. Exoasc. t. IV, f. 1, *Ascomyces deformans* var. *Æsculi* Ell. et Ev., N. Amer. Fungi n. 1887, *Taphrina Æsculi* (Ell. et Ev.)

Giesenhagen in Flora 81 (1895) pag. 358, f. 66. — Surculos et folia inficiens et subinde leviter torquens; maculis 2-5 mm. diam., flavidis, denique penetrantibus et matricis contextum rubefacientibus; ascis amphigenis, dense stipatis, utrinque rotundatis, 16-18 \approx 7-9, cellula basali carentibus; sporidiis ellipsoideis, 6 \approx 3, hyalinis.

Hab. in foliis surculisque *Æsculi californicæ* in California Amer. bor. (HARKNESS).

3. *Exoascus Bussei* v. Fab., Tropenpflanzen, Heft 11 (1907), *Taphrina* 5869 *Bussei* v. Faber in Arb. K. Biol. Anstalt Berlin, VI, Heft 3 (1908) cum icon. et VII (1909) p. 207-209, fig. 8. — Mycelio intracellulari; ascis 15-17 \approx 5, octosporis; sporidiis ellipsoideis 2,5 \approx 1,7; cladomanias, folia magnitudine minora reddendo, efformans.

Hab. in caulibus *Theobromæ Cacao*, Kamerun Africæ trop.

4. *Exoascus Piri* (Kusano) Sacc. et Trott., *Taphrina Piri* Kusano in 5870 Ann. Mycol. III (1905) p. 31. — Maculas in foliis flavidas, albu-pruinosas, subrotundas v. irregulares formans; mycelio subcuticulari, non permanenti; ascis cellula basilari carentibus, cylindraceis utrinque rotundato-truncatis, 29-42,5 \approx 9-13; sporidiis globosis, 3-5 μ . diam.

Hab. in foliis *Piri Miyabei* Sarg., Nikko Japoniæ (KUSANO).

5. *Exoascus andinus* (Palm) Sacc. et Trott., *Taphrina andina* Palm, 5871 in Svensk Bot. Tidsskr. III (1909) p. 193, fig. 1-5. — Maculas sæpe bullatas, indeterminatas, rubescentes efficiens; ascis epiphyllis v. hypophyllis, cylindraceis, apice rotundatis v. truncatis, 27-34 \approx 9,5-13,6, cellula basilari cuboidea epidermidem non intrante, 9-13 \approx 9-10; sporidiis octonis subglobosis, 4,5 \approx 3,5, microsporibus globosis, minutissimis ascum omnino implentibus.

Hab. in foliis vivis *Pruni salicifoliæ*, Quito et Ambato *Æquatoriæ* (LAGERHEIM).

6. *Exoascus Sebastianæ* Sadeb. in Ber. Deut. Bot. Gesell. (1904) 5872 p. 119, t. IX. — Hypophyllus, pustuliformis, in epiphyllis maculiger, sæpe deformans; ascis dense parallele stipatis, valde polymorphis, modo anguste cylindraceis 70-80 \approx 6-9, ima basi 2-3 μ . cr., modo clavatis et magis ludibundis, nunc clavatis, nunc oblongo-ellipsoideis apice rotundatis v. subtenuatis, 57-90 \approx 9-20 (incl. cellula basilari); sporidiis octonis subinde senis v. septenis, monostichis v. distichis, in ascis cylindraceis apicem sæpius occupantibus, ovoideis v. ellipsoideis, 5,5-6,5 \approx 4,5-5, hyalinis, intus nubilosus et 1-guttulatis.

Hab. in foliis *Sebastianæ brasiliensis*, Tubarao Brasiliæ (E. ULE). — Imprimis maxima ascorum variabilitate mox dignoscenda species.

7. *Exoascus Robinsonianus* (Giesenh.) Sacc. et Trott., *Taphrina Robinsoniana* Giesenhagen in *Flora* v. 81 (1895) p. 341-342, fig. 41, *Taphr. alnitorqua* Robins. non Tul. — Cfr. Ellis North Am. Fungi n. 796. — Mycelio hymenium compactiusculum subcuticulare gigante; ascis cellula basilari 15-17 \times 6-10 præditis, cylindræis, apice subrotundatis, basi truncatis, 29-37 \times 6-10, pro more octosporis; sporidiis sphæroideis, 3,5-6 μ . diam., interdum in ipso asco germinantibus.

Hab. in carpellis quæ deformat, *Alni incanæ* in America boreali. — A speciebus alnicolis dignoscitur quia fruticicola et matricem deformans, ascis cellula fulcrante præditis etc.

8. *Exoascus entomosporus* (Thaxt.) Sacc. et Trott., *Taphrina entomospora* Thaxter, *Botan. Gazette*, L (1910), p. 437, tab. XVIII, fig. 1-6 et p. 435, fig. 1. — Strato ascorum livide albido, totam paginam inferiorem folio occupante, ex mycelio inter cuticulam et epidermidem generato nascente; ascis dense confertis, subcylindricis, apice rotundatis v. subtruncatis, cellula basali latiore instructis, supra epidermidem positis; sporidiis entomomorphis, octonis, plasmate dense granuloso obscuratis, primum simplicibus, ovalibus, deinde appendiculatis; appendicibus biformibus, aliis utrinque terminalibus, rectis, cylindræis v. subclavatis, aliis utrinque subterminalibus, plerumque quaternis, rigidis, tenuibus, divergentibus, subcurvatis, subattenuatis, subverticillatis; ascis 55-60 \times 13-15; sporidiis 9-10 \times 3-4; appendicibus terminalibus 8-12 \times 3,5, subterminalibus 15-25 \times 0,8.

Hab. in foliis vivis deformatis *Nothofagi antarcticæ* var. *bicrenatæ* et var. *uliginosæ*, Punta Arenas Patagoniæ, Austr. — Species omnino peculiaris et potius genus propriam (*Entomospora* Sacc.) formans.

TAPHRINA Fr. — Syll. VIII p. 812, X p. 67, XI p. 437, XIV p. 824, XVI p. 1152, XVIII p. 197.

1. *Taphrina Kusanoi* Ikeno in *Flora* v. 92 (1903) p. 2-3, tab. 1-2, fig. 1 17. — Ascis hypophyllis, cellula fulcrante carentibus, cylindræis, apice rotundatis deorsum leviter tenuatis, basique vero imae dilatatis, 102-117 \times 13-19, myriosporis; sporidiis (conidiis?) perexiguis, ellipsoideis v. oblongis.

Hab. in foliis *Pasaniae cuspidatae* in Japonia (KUSANO). —

Affinis Taphrinæ Johansonii.

2. *Taphrina moriformis* Bubák, Bull. Herb. Boiss. 2 ser., VI (1906) 5876 p. 398. — Excrecentiis moriformibus, gibboso-foveolatis, 2-5 mm. diam., carnosis, obscure brunneo-purpurascentibus; ascis subcylindraceis 30-45 μ . long., apice 4-6 μ . latis, ibique tunica 2-3 μ . cr., basi angustioribus, pallide flavo-brunneis; sporidiis nondum evolutis.

Hab. in frondibus *Aspidii rigidi*, Njagus prope Cetinje Montenegro.

3. *Taphrina Mume* Nishida, Cfr. K. Yoshino, in Bot. Mag. Tokyo 5877 XIX (1905) p. (203).

Hab. in foliis *Pruni armeniacæ* var. *Ansu* in Japonia. —
Diagnosin ab auctore obtinere non potui.

4. *Taphrina Hiratsukæ* Nishida, Cfr. K. Yoshino in Bot. Mag. Tokyo 5878 XIX (1905) p. (202).

Hab. in frondibus *Onocleæ* sp. in Japonia. — Diagnosin ab auctore consequi non potui.

Genus incertæ sedis.

ROLLANDINA Patouill. Bull. Soc. Mycol. Fr. (1905) p. 80, t. V (Etym. a cl. mycologo L. ROLLAND). — Receptaculum determinatum ex hyphis septatis, ramosis, pannoso-contextis formatum. Asci suboctospori, ovoideo-globosi, minuti, hyalini, dense glomerati: glomeruli numerosi sparsi, noduliformes, trama undique obvoluti. Sporidia lentiformia circulariter canaliculata, continua, hyalina. — Genus ab auctore *Gymnoascaceis* interim adscriptum, sed revera multum desciscit.

1. *Rollandina capitata* Patouill., l. c. p. 83, tab. V. — Albida, erecta, 5879 stipitato-capitata, 15-20 mm. alta, molliusculo-gossypina; stipite rigidulo, glabro, 1 mm. cr., cylindraceo, superne dilatato; capitulo subgloboso, 5-8 mm. lato, nodulis albidis 150-300 μ . cr.; ascis ovoideo-globosis, tenuiter tunicatis, sessilibus, 2-4-8-sporis, 8 \times 6; sporidiis lentiformibus, 2,5-3,5 μ . diam., levibus, circulariter canaliculatis.

Hab. ad quisquilias prope Bau-hau in regione Cai-Kinh Tonkini (L. BOULAN).

Fam. 14. Endomycetaceæ SCHRÖT.**EREMASCUS** Eid. — Syll. VIII p. 822.

1. *Eremascus fertilis* Stoppel, Flora XCVII (1907) p. 332. — Ascis 5880 sphaeroideis, 7-10 μ . diam. (ex icone), copiosissimis ex duarum hypharum contiguarum copulatione orientibus, octosporis; sporidiis tunica duplici præditis, ut ea *Saccharomycopsisidis* germinantibus, oblongo-ellipsoideis, sæpe subinaequilateris, 5,2 \approx 3.

Hab. in charta cum gelatina Mali et Ribis, loco frigido servata, in Germania.

ENDOMYCES Rees — Syll. VIII p. 821, X p. 70, XVI p. 1153, XVIII p. 202.

1. *Endomyces Mali* C. E. Lewis, Bull. Maine Agricult. Expt. St. 5881 n. 178 (1910) p. 63, fig. 58-71. — Mycelio ramoso, diffuso albido; conidiophoris brevibus, apice conidiis oblongis, subracemosis, levibus, hyalinis 8 \approx 3 coronatis; ascis plerumque ex ramulis brevibus lateralibus orientibus, globosis, 11-14 μ . diam.; sporidiis plerumque sphaericis v. sphaerico-oblongis, 5,5 \approx 4,5, maturis brunneis, levibus.

Hab. in fructibus putrescentibus Piri Mali quos valde vexat, Orono, Maine Americæ borealis. — Quoad culturam artefactam confer Lewis l. c.

2. ?*Endomyces Hyleceti* Neger, Ber. Deutsch. Bot. Gesell. XXVII 5882 (1909) p. 388, cum icone (absque diagnosi). — Tantum formæ conidice observatæ: acervulis albis subcaseosis; hyphis 10 μ . cr. repentibus septatis, hinc inde ramos conidiophoros erectos simplices v. apice brevissime ramulosos gerentibus; conidiis perfecte globosis, acrogenis v. pleurogenis, subsolitariis, crasse tunicatis, circ. 18 μ . diam. (ex icone); hyphis alteris in catenulas *Oosporæ* longas abeuntibus; articulis breviter cylindraceo-oblongis utrinque truncatis.

Hab. in «ambrosia» *Hyleceti* dermestoidis in truncis arborum frondosarum et coniferarum, in Germania. — Species quoad genus omnino dubia.

3. *Endomyces vernalis* Ludw., Centralbl. Bakt. X (1891) pag. 12 et 5883 Lehrb. nied. Krypt. p. 202, Lindner Kryptog. Fl. Brandb., Pilze I, p. 34, f. 15. — Hyphis mycelii parce ramosis, 3-4 μ . cr., initio

subiculum minutum, denique stratum plura centimetra extensum cremori simile ex albo rubescens efformantibus; ascis rarioribus et ex mycelio dubie oriundis, subglobosis, $13-14 \approx 1,3$; sporidiis nondum bene observatis.

Hab. ex hypha scatente truncorum Betulæ et Carpini Betuli prope Greiz (LUDWIG) et Finkenkrug, Dessau etc. (LINDAU) sed mycelium tantum. In hoc observantur chlamydosporæ sphaericæ pleurogenæ et catenulæ oosporæformes acrogenæ.

4. **Endomyces javanensis** Klöcker, C. R. Trav. Labor. Carlsberg 5884 VII vol., 4 livr. (1909) p. 267, fig. 1-3. — Mycelio filiformi remote septato, in articulos cylindraceos facile secedente, hinc inde citriformiter inflato; cellulis citriformibus denique endosporas 1-2 generantibus; sporidiis seu endosporis ellipsoideo-globulosis, levisime depressis, asperulis, $3-4,5 \approx 2-3$, costula angustissima æquatoriali v. plus minus laterali percursis.

Hab. ad terram ex insula Java in Germaniam allatam, indeque variis in mediis facile cultus in instituto Carlsberg, Copenhagen. — Fermentationem non provocat.

5. **Endomyces fibuliger** Lindner, Wochenschr. f. Brauerei XXIV (1907) 5885 p. 469, Dombrowski W., in C. R. trav. Laborat. Carlsberg, VII, fasc. IV (1909) pp. 247-266, cum 10 fig. — Mycelio filiformi varie et parce ramoso, inæquali, tortuoso, fibulato-septato, ibique denticulato, cellulas globosas, leves, $15-16 \mu$ diam. ex denticulis generante; cellulis denique endosporas 3-4 gignentibus; sporidiis seu endosporis subhemisphaericis, levibus, $6-7 \mu$ latis, facie plana circumcirca marginulo emergente acuto ornatis, tunc faciem pileiformem induentibus; endosporis facile germinantibus et cellulas omino saccharomycetiformes gignentibus.

Hab. in pane, ubi fungillus maculas cretaceas fingeat, inde variis in mediis cultus in Dania et Germania. — Fermentationem provocat.

Fam. 15. Ascocorticiaceæ SCHRÖT.

ASCOCORTICIUM Bref. — Syll. X p. 71, XVIII p. 198.

1. **Ascocorticium albidum** Bref. — Syll. X, p. 41 — var. **aphthosum** 5886 B. R. S. in Saccardo, Not. Myc. VI, Ann. Myc. vol. III (1905) pag. 505. — Effusum, sparsum v. confluens, submembranaceum,

lenticulare, $\frac{1}{8}$ - $\frac{3}{4}$ mm., cinereum, margine pallidiore; ascis sessilibus, verticaliter stipatis, aparaphysatis, ellipsoideo-oblongis, octosporis; sporidiis hyalinis, ellipsoideis, $6 \times 2,5$.

Hab. in cortice interiore Pini silvestris, Westmalle, Belgii.

Fam. 2. Atichiaceæ MILLARDET ()*.

(Seuratiaceæ Vuill.).

ATICHIA Flot. in Linnæa XXIII (1850) p. 149, Rehm Disc. p. 500 (Etym. *a* priv. et *theicos* paries h. e. excipulum nullum). — Characteres fam. et gen. Thallus gelatinosus subrotundus, pro more laciniato-ramosus, sæpe stellato-ramosus, nigricans, applanatus, intus albidus; contextu ex cellulis gemmantibus mucò immersis, dein in catenas junctis formato, cellulis superficialibus saturatius coloratis, rugulosis. Asci sub thalli superficie v. inferius in glomerulos dispositi, suboctospori; sporidia typice bilocularia, hyalina v. fuscella.

1. **Atichia glomerulosa** (Ach.) Flot. Linnæa XXIII (1850) pag. 149, 5887 Rehm, Discom. p. 500, *Atichia Mosigii* Flot. l. c. p. 150, *Hyphodictyon lichenoides* Millard., Act. Soc. helv. Sc. nat. (1866), *Collema glomerulosum* Ach. Lich. univ. p. 641 (1810). — Thallis basi contracta sessilibus, depresso globulosis atro-brunneis, profunde divisis, subinde dichotomicè partitis, apicibus acutis, 2-4 mm. lat., 1 mm. alt. ex cellulis inæqualiter globulosis, hyalinis, massa gelatinosa obvolutis constantibus, superficie cellulis breviter pedicellatis, copiosis, subrotundis, atro-brunneis, applanatis v. convexis, ad medium sensim collabascentibus et pallidis marginatis, extimis (conidiis?) globoso-ellipsoideis 4 μ . lat., seriatis; ? ascis clavatis 6-sporis; sporidiis

(*) De hoc singulari et ancipiti familiola cfr. v. Höhnelt « *Atichia Treubii* Saccharomyc. » in Annal. du Jardin Bot. de Buitenzorg, 2 sér. III suppl. (1909) p. 19. Quomodo prof. v. Höhnelt hos fungillos nigricantes, epiphyticos, fere capnodiaceos ad Saccharomycetes possit referre, me omnino latet. — Genera *Heterobotrys* Sacc. et forte quoque *Actinomma* Sacc. sunt verisimiliter *Atichia* species tantum conidiophoræ, quarum asci nondum innotuerunt. Mea *Heterobotrys paradoxa* (Cfr. Fungi ital. t. 807) omnino congruit cum *Seuratia Tonduzi* Mang. et Pat. Comptes rendus des séances de l'Acad. des Scienc. Paris (1912) t. 151, p. 1476, fig. I-II.

subfusoides, 1-2-cellularibus, 11-15 \times 4-5, guttulis binis valde refringentibus foetis.

Hab. in foliis ramisque Pinorum, Abietum, Tiliæ, Visci in Lusatia, Germaniæ pluribus locis. Descriptio ascorum cum sporidiis est deprompta a cl. Millardetio, qui vero apotheciis 60-90 μ . diam. in *Atichia* parasiticis pertinere censet. Sec. von Höhnelt *At.* (*Seuratia*) *pinicola* huc pertinet.

2. *Atichia Treubii* v. Höhn. in Ann. Jard. botan. de Buitenzorg II 5888 sér., III suppl. p. 27. — Thallus superficialibus sparsis v. gregariis, globoso-tuberoideis, 150-400 μ . diam., subinde laciniatis, pro more seriatis v. seriato-stellatis, mollibus, gelatinosis, siccis applanatis, nigricantibus, udis olivaceo-brunneis, subdiaphanis; contextu interiore hyalino ex cellulis versiformibus ellipsoideis v. citriformibus v. angulosis, reticulato-catenulatis, continuis v. isthmico-connexis, 5-8 μ . long. efformato; cellulis superficialibus globoso-ellipsoideis, laxioribus, 3-5 μ . diam., extus saturate coloratis; ascis sparsis v. in greges minutos sub superficie dispositis, ovoideis, basi apiculatis, crasse tunicatis, octosporis, 32 \times 25, apophysatis; sporidiis conglobatis, bicellularibus, ovoideis, diu hyalinis, demum brunneolis, muco obvolutis, crasse tunicatis, 16-18 \times 9-10, cellula superius leviter crassiore; conidiis in thallo proprio oriundis, subsuperficialibus, globoso-ovoides, brunneolis, 3-4 μ . diam.

Hab. in foliis vivis Fici elasticæ in horto montano Tijboudas ins. Javæ.

3. *Atichia pinicola* (P. Vuill.) Sacc. et Trott., *Seuratia pinicola* P. 5889 Vuill. Bull. Soc. mycol. Fr. (1905) p. 74, t. IV. — Disciformis, mucilaginea, separabilis, extus nigricans, cuticula tenuissima, vix 0,4 mm. cr. tecta, intus plus minus vesiculosa, hyalina, vesiculis sphaeroideis usque ad 8 μ . diam., inter se isthmis cylindraceis brevibus connexis, denique in chlamidosporas transmutatis et tunc 10 μ . diam., membrana 1,5 μ . cr. tectis; ascis intermixtis octosporis globosis, dein subpiriformibus, hyalinis, 22-23 μ . diam. vel 24-27 \times 10-13; sporidiis didymo-constrictis, hyalinis, 10-11 \times 6, loculo superiore interdum paullo ampliore.

Hab. in ramis cancerosis Pini halepensis, Soubès Galliæ. — Sec. v. Höhnelt species hæc collideret cum *Atichia glomerulosa*.

4. *Atichia Vanillæ* (Pat.) v. Höhn., l. c. pag. 27 (ex errore « *vanillicola* »), *Seuratia Vanillæ* Pat., Bull. Soc. Myc. de France XXII (1906) p. 54, fig. 4. — Ascomatibus globosis circiter 600 μ . diam., gelatinosis, astomis, fusco-brunneis, gregariis v. solitariis, rarius

confluentibus, ex hyphis moniliformibus gelatinosis hyalinis (articulis 6-15 μ . long.) compositis; ascis ovoideis 40-50 \times 30; sporidiis hyalinis, ellipsoideis, medio septatis constrictisque, 19-20 \times 14, intus guttulatis.

Hab. in foliis languidis *Vanillæ planifoliæ*, Tahiti Polynesia. — *S. coffeicolæ* Pat. affinis.

5. *Atichia Millardeti* Raciborski, Bull. Ac. Sc. Cracovie (1909) p. 369. 5891

Thallo sessili, 3-14 mm. lato, nigro, polypoideo, applanato, radiatim fisso, libero, ramis modo brevioribus modo longioribus: brevioribus, sectione ovata v. rotunda indivisis, longioribus inæqualiter digitatis v. duplicato digitatis, gelatinosis, ex cellulis inflatis hyphas ramosas rosulatas formantibus contextis; fungi superficie verrucosa atro-brunnea, parte interiore læte brunnea; tuberculis in thalli superficie pulvinatis, 150-260 μ . lat., 120 μ . alt., subrotundis, brunneo corticatis et asperulis, intus ascigeris; ascis stratosi apophysatis ad hyphas lateraliter insertis, denique cortice disrupto emergentibus, crasse tunicatis, late ovatis basim versus tenuatis 60 \times 35, octosporis; sporidiis bicellularibus, ovoideis, brunneo-tunicatis, levibus, utrinque rotundatis, medio constrictis, 16-19 \times 7-9, muco immersis.

Hab. in foliis *Syzygii jambolani*, *Cinnamomi zeylanici*, *Coffeæ arabicæ*, *Anacardii occidentalis*, *Styracis Benzoin*, præcipue in hortis Tjikemeuh Buitenzorg Javæ.

Fam. 17. Saccharomycetaceæ REES (*).

SACCHAROMYCES Meyen — Syll. VIII p. 916, XI p. 437, XIV p. 828, XVI p. 818, XVIII p. 198.

1. *Saccharomyces Würtzii* Boutroux in Ann. Sc. nat. ser. VI 17 (1884) 5892 n. XVIII, p. 197 et pag. 200, t. XVI, f. 42-46. — Tenuissime

(*) De biologia et morphologia hujus familiæ multæ et graves dissertationes nuper prodierunt sed multum adhuc inquirendi reliquum est. Profecto hic essent referenda genera et species tantum ascophora, hinc gen. *Mycoderma*, *Cryptococcus* etc. essent excludenda, tamen ob vegetationis notas et habitum consimilem hic recensui. Ubique studiosus fontes descriptionum conferre debet, nam hic perpaucas tantum notas morphologicas at nullas physio-chemicas afferre potui.

pelliculosus, liquidum non obturbans; cellulis liberis v. aggregatis, globosis v. subglobosis, guttulas 1-2 majusculas, chlorino-brunneolas foveantibus, serius subirregularibus et guttulas minores includentibus.

Hab. in floribus, fructibus maturis e. g. Ribis, Vitis etc. et in Apibus in Gallia.

2. **Saccharomyces cirratus** Boutr. in Ann. Sc. Nat. sér. VI, 17 (1884) 5893
n. XIII, p. 190 et p. 200, t. XV, f. 32-33. — Tenuissime pelliculoso-flocculosus, intra liquidum conspicue floccosus, sed non obturbans; cellulis junioribus in greges majusculos confertis, circumcirca hyphas radiatim dispositas, cylindraceas, articulatas, interdum ramosas et tortuosas proferentibus, ellipsoideis v. globosis, sæpe breviter catenulatis, hyalinis, contentu homogeneo.

Hab. in floribus Petasitis, Ericæ, Nonnæ, Borriginis, in fructibus immaturis Ribis, in Apibus et Bombis etc. in Gallia. — An potius forma *Oosporæ* (*Sachsicæ*)?

3. **Saccharomyces Pseudomycoderma** Boutroux, in Ann. Sc. nat., sér. 5894
VI, 17 (1884) pag. 191, n. XIV et p. 200, t. XV, f. 34 et XVI, f. 35. — Mycelio (culto in musto) membraniformi, albo, densiusculo, ut *S. Mycoderma*; cellulis proteiformibus et magnitudine et dispositione variis, junioribus ellipsoideis, minutis, denique amplioribus, catenulatis vel non, subinde multo longioribus cylindraceis, nucleolis in quoque articulo singulis valde refringentibus.

Hab. frequenter in floribus et fructibus Sedi, Rhois, Rubi, Ribis etc. nec non in insectis Apibus, Muscis, Cetonis in Gallia. — An genuina *Saccharomycetis* species? An potius *Oosporæ* (*Sachsicæ*) forma?

4. **Saccharomyces Rouxii** Boutr. Ann. Sc. Nat. sér. VI, 17 (1884) 5895
pag. 196, n. XVII et 200, t. IV, fig. 4, t. V, fig. 8 a-b. — Tenuissime pelliculosus, intra liquidum vix flocculosus, diaphanus; cellulis globosis v. ovoideis, vere regularibus, enucleatis, breviter catenulatis, apice proliferantibus.

Hab. in syrupis, confecturis atque in glycosio solido in Gallia.

5. **Saccharomyces monacensis** Hans., C. R. Trav. Laboratoire d. 5896
Carlsberg VII (1908) fasc. III, p. 196, fig. 6-9 (absque diagn.). — A *Sacch. carlsbergensi* Hans. differt præcipue quod temperie humiliori (1°-9°C.) ejus coloniæ e cellulis ellipsoideis v. sphaeroideis constitutæ prævalent præ coloniis mycelicis.

Hab. in fermentatione Cerevisiæ «*levure basse de Carlsberg*» dicta et in fermentatione Cerevisiæ Monacensi frequens.

6. **Saccharomyces carlsbergensis** Hans, C. R. Trav. Laboratoire d. 5897
Carlsberg VII (1908) fasc. III, p. 188, fig. 1-5, 10 (absque diagn.).
Cellulis variabilibus, ellipsoideis, ovoideis, piriformibus vel etiam subglobosis, cellulis giganteis nonnullis immixtis; temperatura germin. inter 0°C. et 33,5°C.; temperatura 0°C-9°C promovet coloniam mycelicam subtorulosam, temperatura superiore solum cellulas gemmantes favet; ascosporæ raro occurrunt.

Hab. in fermentatione Cerevisiæ «*levure basse de Carlsberg*» dicta.

7. **Saccharomyces Pasteurianus** Rees — Syll. VIII, pag. 917. — Ut 5898
ejus formæ II et III citandi sunt **Sacc. intermedius** Hans. ap. Lindner Krypt. Fl. Brandenb. VII, p. 10, f. 2 et **Sacc. validus** Hans. ap. Lindn. l. c. fig. 1, qui non in vino sed in cerevisia evolvuntur et eam in fermentationem inducunt.
8. **Saccharomyces ellipsoideus** Rees — Syll. VIII, p. 917. — Ut ejus 5899
forma II, nempe non in vino sed in cerevisia oriens eamque obturbans et vexans pertinet **Saccharomyces turbidans** Hans. ap. Lindner Krypt. Fl. Brandenb. VII, p. 11, f. 2.
9. **Saccharomyces Batatæ** Saito in Centralbl. Bakter. XVIII (1907) 5900
p. 35, t. II, f. 19-21. — Cellulis forma et magnitudine ludibundis, 3-10 μ . diam., sphaeroideo-ovatis v. subinde ellipsoideo-oblongis, 10-12 \times 4-6, in cultura magis elongatis et longe catenulatis; ascis 1-4-sporis, sæpius 2-3-sporis; sporidiis sphaeroideis, rarius subovoideis, 2-4 μ . diam., sæpius 3-4 μ .

Hab. in liquore, quem generat, Moromi dicto, e radicibus Batatæ extracto, in insula Hachijo Japoniæ.

10. **Saccharomyces Tokyo** Nakazawa, Centralbl. f. Bakter. etc. II 5901
Abt. XXII (1909) p. 540, fig. 1, 3, 5, 7. — Cellulis nunc globosis et 1,2-3,2 μ . diam. nunc subellipsoideis et 3-14 \times 2-9; cellulis giganteis plerumque ovoideis v. piriformibus; plasmate homogeneo v. modice granuloso; endosporis usque ad 4 in quoqueasco; temperatura sporificationis 10°-35°C., optimum 31°C.

Hab. in liquore Saké in quo fermentationem alcoholicam inducit, in Japonia.

11. **Saccharomyces Yedo** Nakazawa, Centralbl. f. Bakter. etc. II Abt. 5902
XXII (1909) p. 540, fig. 2, 4, 6, 8. — Cellulis globosis 3,2-6,4, ellipsoideis, subellipsoideis et suballantoideis 4,5-20,8 \times 3,2-7,2; cellulis giganteis plerumque ovoideis, piriformibus; plasmate homo-

geneo v. modice granuloso; endosporis usque ad 4 in quoque asco; temperatura sporificationis 10°-35°C., optimum 31°C.

Hab. in liquore Saké in quo fermentationem alcoholicam inducit, in Japonia.

12. **Saccharomyces orientalis** Beijer. in Centr. Bakt. II Abt., IV (1898) 5903 p. 725, t. XII, f. 5-6. — Cellulis subsolitariis, ellipsoideis, v. ovoideis v. oblongo-ovoides, 4,5-7 \approx 4-4,5 parce guttulatis; cellulis endosporeis (ascis) subglobosis, 6-7 μ . diam., plerumque 2-3-sporis; sporidiis globosis v. e mutua pressione paullulum depressis, 3-3,5 μ . diam.

Hab. ex fermento Koji albo dicto ex Japonia (EYKMAN) dein in musto cerevisiæ cultus. — Expositio auctoris tantum biologica. Notas ex iconibus eruimus.

13. **Saccharomyces Sojæ** Saito, Bot. Mag. Tokyo XIX (1905), n. 222, 5904 p. 76 et in Centralbl. für Bakter. II Abt. XVII (1907) p. 104, fig. 4 et 8 a. — Cellulis sphæroideis v. ovoideis, crassiuscule tunicatis, 4-8 μ . diam., contentu homogeneo vacuolis majusculis prædito; sporidiis quaternis, rarius singulis, globosis, 2,7-4,5 μ . diam., intus minutissime granulosis.

Hab. in fermento Sojæ in Japonia.

14. **Saccharomyces uvarum** Beijer. in Centralbl. Bakter. II Abt., IV 5903 (1898) p. 725, t. XII, f. 3-4. — Cellulis ellipsoideis v. globoso-ellipsoideis, 5,6 μ . diam. vel 8-9 \approx 5, minute pluri-guttulatis, solitariis; cellulis endosporeis (ascis) plerumque globosis, pro more 4-sporis; sporidiis sphæricis, 1,7 μ . diam.

Hab. in succo baccarum Ribis (*Johannisbeerensaft*) in Hollandia deinceps in *Agar* cultus. — Expositio auctoris tantum biologica; notas ex iconibus eruimus.

15. **Saccharomyces coreanus** Saito, Centralbl. f. Bakt. II Abt. XXVI 5906 (1910) pag. 371, f. 1. — Cellulis subglobosis ovoideis v. breviter allantoideis, crassiuscule tunicatis, 3-7 μ . diam., raro gemmiferis, sæpius solitariis; endosporis binis v. quaternis subglobosis 2-3,5 μ . diam., facile gignentibus; in glycosium, saccharosium fermentationem inducens, non vero in maltosium; optimum temperiei pro germinatione 37°C., pro sporificatione 32-34°C.

Hab. in fermento sic dicto sinensi in Corea. — Affinis *Sacch. Marxiano* a quo differt quia in inulinum fermentationem non inducit. Utitur ad panem paniceum et spelteum conficendum. — Var. **major** K. Saito l. c. p. 374, fig. 2. — Differt cellulis majoribus, 8-12 μ . diam., sporidiis etiam majoribus, 3-4 μ . diam.

16. **Saccharomyces Allii** Sorok. apud Sorauer Atlas Pflanzenkr. t. XIX, 5907 f. 1-2. — Cellulis forma et magnitudine variabilibus, 3-15 \times 3, cito se multiplicantibus, sed tertia die fatiscentibus (ob evolutionem Bacteriorum?).

Hab. in squamis junioribus bulbi Allii Cephæ in Rossia, æstate humida (SOROKINE). — Inter squamas imprimis ad centrum bulbi initio efformantur guttulæ gelatinosæ, albæ, omnino ex cellulis Saccharomycetis constantes et bulbos, fermentescendo, in pulvem mucosam flavam postremo mutantes. Bacteria quoque bulbis morbum afferunt sed sæpe sine Saccharomycete, hinc bacteriosis est infectio propria.

17. **Saccharomyces Brassicæ** Wehmer in Centralbl. Bakter. II Abt. 5908 XIV(1905) p. 783, t. II, p. 68. — Cellulis globoso-oblongis, parum extensis, minutis, vix 6 \times 4-5, interdum (in culturis) minoribus; sporidiis adhuc non observatis; in succo Brassicæ oleraceæ fermentationem fervidam generat.

Hab. in caulibus (Brassicæ) salitis (*Sauerkraut*) in Germania alibique in officinis. — Cl. Auctor distinguit in eadem matrice quoque formam II (fig. 7): cellulis jugiter globosis, 3,6-4,8 μ . diam., interdum minoribus, nucleolis minutis fortiter refringentibus fartis; et III (fig. 8) cellulis ellipsoideis paullo longius extensis, numquam globosis. Utraque quoque in officinis Brassicæ salitæ.

18. **Saccharomyces javanicus** Kruyff, Centralbl. f. Bakter. etc. II 5909 Abt. XXI (1908) p. 618. — Cellulis ellipsoideis, 10-12 \times 6-8; pro evolutione optimum temperaturæ 37°C., maximum 41°C.

Hab. frequens ad folia arborum plurimarum in ins. Java. — Inducit fermentationem alcoholicam in glycosio, saccharosio et maltosio. Speciei præsentis auctor sex formas alias distinguit, de quibus cfr. l. c.

19. **Saccharomyces sardous** Grixoni, Nuovo latte fermentato facile a 5910 prepararsi, in Ann. della medicina navale, vol. II, fasc. 3 (1905). — Cellulis aërobiis, initio globosis 3 μ . diam., demum ovoideis 8 μ . longis, apice gemmiparis, tunica duplici præditis, intus granulosis, temp. 20-25°C. ascosporas gignentibus.

Hab. in lacte in quo fermentationem peculiarem inducit. — Apud sardos vulgo *Gioddu* audit et jamdudum bene utitur. Ex eodem lacte fermentescente auctor eduxit Bacillum proprium, quem *B. sardoum* nuncupavit.

20. **Saccharomyces Cicadarum** K. Sulc in Sitzungsab. K. Böhm. Ge- 5911

sellsch. d. Wiss. Prag (1910) pag. 2, c. fig. (extr.)(*) — Cellulis non germinantibus solitariis, elongatis, 10-12 \times 2-3, subinde longioribus, utrinque obtusulis; germinantibus inæqualiter oblongo-fusoideis, uno apice longe sensim tenuatis, fere cuspidatis, tunica tenui præditis, minute nucleolatis, ad apices attenuatos cellulas filias, subinde 2-5 inter se connexas gemmiparitate generantibus; cellularum seriebus interdum usque ad 60 μ . longis.

Hab. intra larvas Cicadæ (Tettigæ) Orni in Bohemia.

21. **Saccharomyces Conomeli-limbati** Karel Sulc, l. c. pag. 18, fig. X, 5912 extr. — Cellulis ellipsoideis v. ovoideis, minutissimis, utrinque subrotundatis, 3 \times 1, uno polo apiculatis, altero cellulam filiam gemmipare exerentibus, plasma granulosum nucleumque globulosum continentibus, non catenatis.

Hab. in hæmolympa Conomeli limbati ex Homopteris in Bohemia.

22. **Saccharomyces Macropsidis-lanionis** Karel Sulc, l. c. p. 17, f. IX 5913 extr. — Cellulis fusoideis v. oblongo-fusoideis, utrinque acutulis v. hinc subrotundatis, uno polo leviter apiculatis, altero cellulam filiam gemmipare exerentibus, plasma granulosum et nucleum continentibus, minutis, 3 \times 1, non catenatis.

Hab. in hæmolympa larvæ Macropsidis lanionis ex Cicadinis, in Bohemia.

23. **Saccharomyces symbioticus** G. Teodoro, in Atti Accad. Sc. ve. 5914 neto-trent-istr. Padova V (1912) p. 13. — Cellulis ovoideis uno apice tenuatis, 8-10 \times 3-4, plasmate continuo v. granuloso, hinc v. utrinque gemmantibus; gemmulis primo globulosis demum in formam cellulæ matris mutatis.

Hab. in hæmolympa Lecanii Oleæ φ et Pulvinariæ camelicolæ φ , Padova. — Teste auctore species valde accedit ad *Saccharom. apiculatum* var. *parasiticum* Lindner in Centralbl. f. Bakt. II Abt. (1895) p. 785, c. ic. lectus in Aspidioto Nerii ad folia Myrti, Berolini.

24. **Saccharomyces Anobii** Buchner, Stud. intracell. Symbiont. in 5915

(*) Quoad genera et species plus v. minus genuinas Saccharomycetum intra cellulas corporis insectorum quorundam et præsertim Hemipterorum symbiotice parasitantes conferenda sunt commentaria oll. K. SULC, U. PIERANTONI, P. BUCHNER etc. Hic ex diagnosis plerumque imperfectis auctorum notas vix sufficientes rettuli,

Arch. Protistk. Jena (1912) p. 104, f. 29. — Cellulis piriformibus, interdum curvulis, vacuolatis; mycelio (in culturis) moniliformi, ramuloso, cellulis ovato-oblongis, crasse guttulato-vacuolatis.

Hab. in cellulis intestinalibus *Anobii panicei* in Germania.

25. *Saccharomyces Anguillulæ* Dang., Le Botaniste, X (1907) p. 73, 5916 t. V, f. 5-10. — Cellulis oblongo-ellipsoideis, utrinque rotundatis, æqualibus, 3-8 in catenulas dispositis et facile secedentibus, plerumque nucleo unico (raro binis) nucleolato præditis, præterea granulosis vacuolatisque (mensuris non indicatis).

Hab. intra corpus *Anguillulæ* in Gallia.

26. *Saccharomyces granulatus* Vuill. in Guéguen Champ. paras. 5917 p. 104, fig. 4. — Cellulis ovoideis v. ellipsoideis, interdum globulosis v. oblongis, 2-10 μ . long., plerumque 4-5 \times 3-4, tunica verruculis solitariis v. regulariter seriatis conspersa præditis, gemmulam unicam, raro 2-3 formantibus, guttulasque oleosas roseas, culturâ rubras fomentibus; cellulis (ascis) tunica tenuiori præditis, levibus, sporidia 2-4 sphaerica v. ellipsoidea fomentibus.

Hab. in hamatmate ossis maxillaris inf. hominis in Gallia. Quoad notas biologicas et pathologicas cfr. Guéguen l. c.

27. *Saccharomyces tumefaciens* (Curtis) Busse in Guéguen, Champ. 5918 paras. p. 104, fig. 3. — Cellulis sphaericis, interdum ovoideis germinando 40 μ ., protoplasma granulosum 16-20 μ . diam. fomentibus, tunica 0,5 μ . cr.; capsula gelatinosa 8-10 μ . cr.

Hab. in tumoribus et abscessibus hominis in Gallia. — Pathogenus in mûre, cane, cavia etc. Quoad caract. biolog. et pathol. cfr. Guéguen l. c.

28. *Saccharomyces anginæ* Vuill. in Guéguen, Champ. paras. p. 103, 5919 fig. 2. — Cellulis ovoideis, 8-9 \times 5-6, solitariis v. per 8-10 aggregatis, sæpe uno apice germinantibus; cellulis (ascis) [in cultura] tetrasporis; sporidiis per tetrades v. seriatim dispositis, subrotundis, 2 μ . diam.

Hab. in partibus angina correptis hominis in Gallia. — Morbi causa certa videtur. Characteres biologicos vide ap. Guéguen l. c.

29. *Saccharomyces Blanchardi* Guiart in Coupin, Champ. parasit., 5920 t. XXVIII, f. 1-5, *Sacch. de Blanchard* etc. Guéguen, Champ. paras. p. 105. — Cellulis sphaericis 1,5 μ . subinde usque ad 15-20 μ . diam., plasmate diaphano vix granuloso, viridulo faretis, nucleo nullo manifesto, tunica crassiuscula zonaque v. capsula mucosa diametrum cellule æquante præditis, gemmulis sæpe geminatis.

Hab. in massa glareosa peritonei hominis ægroti in Gallia.

30. **Saccharomyces membranogenes** Steinhaus, Centralbl. f. Bakt. 5921

I Abt. XLIII (1907) p. 49. — Cellulis sphaericis, 6-7 μ . diam., germinationis ope sæpius piriformibus v. clavatis et demum, more solito, constrictionis ope cellulas filias generantibus vel hinc inde e peripheria gemmulas procreantibus; plasmate minute granuloso, corpuscula 1-2 v. plura refringentia continente.

Hab. in membrana tracheali pueri *scarlatina* laborantis in Germania. — Cultus capsulas non format, sed easdem profert in animalibus artificiose infectis.

CRYPTOCOCCUS Kütz in Linnæa VIII (1833) p. 365, em. Vuill. et Guéguen, Champ. paras. pag. 106, *Atelosaccharomyces* Beurm. et Goug. (1910) (Etym. *cryptos* abditus et *coccus* pro semen seu spora). — Genus temporarie colligit *Saccharomycetis* species ascis (hucusque) ignotis (*).

1. **Cryptococcus degenerans** (Roncali) Vuill. in Guég., l. c. p. 107, 5922 f. 6. — Cellulis subrotundis, rarius ovoideis, v. reniformibus, tunica tenui demum spissa; protoplasmate initio refringente et homogeneo, postremo vacuolato et parce granuloso.

Hab. in gangliis axillaribus feminae cancro mamillari affectæ inque aliis tumoribus in Italia, Gallia (RONCALI). — Quoad notas biologicas et pathologicas cfr. Guéguen l. c.

2. **Cryptococcus Costantini** Guéguen, Champ. paras. p. 114, *Saccharomyces hominis* Cost. — Cellulis globosis; a *Crypt. lithogene* dignoscitur coloniis senescendo non brunnescentibus et a *Crypt. tumefaciente* tunicis in mediis communibus non se incrassantibus.

Hab. in carcinomate mamillari feminae in Gallia (COSTANTIN).

3. **Cryptococcus Rogerii** Sartory et Demanche, Bull. Soc. Mycol. Fr. 5924 XXIII (1907) p. 179. — Cellulis elongatis subovoideis, 8-10 \approx 2-3, ut *Saccharomyces* germinantibus, temp. opt. 30-35°C.

Hab. in pure ex peritonitide feminae ægrotæ, Parisiis. — Segregat invertinam, inducit fermentationem alcoholicam, scindit glycosium et maltosium; coagulat lac; præcipitat caseinam; inoculatus in leporem est pathogenus.

(*) Non paucæ ex præcedentibus speciebus adhuc non ascophoræ inventæ huc ducendæ essent. Cfr. quoque *Torulopsis* Berl.

4. **Cryptococcus Gilchristi** Vuill. in Guég., Champ. paras. pag. 108, 5925 fig. 7. — Cellulis rotundis v. subovoideis, 16 μ . diam., tunica 3 μ . cr. præditis, 1-vacuolatis, germinantibus.

Hab. in scrofulodermatite, pseudolupo etc. hominis in America boreali (GILCHRIST). — Notas biolog. et pathol. vide apud Guéguen l. c.

5. **Cryptococcus Plimmeri** Costantin apud Guéguen, Champ. paras. 5926 p. 112. — Cellulis subrotundis, 4-10 μ . diam., germinantibus liberis v. intracellularibus, solitariis v. 2-60 congregatis; tunica bi-stratosa, zona peripherica hyalina.

Hab. in carcinomatibus humanis in Germania (PLIMMER). — Quoad characteres biologicos et pathologicos cfr. Guéguen l. c.

6. **Cryptococcus hominis** Vuill. apud Guég., Champ. paras. p. 109, 5927 f. 10. — Cellulis subrotundis, subinde ovoideis, tunica spissa præditis, germinantibus et sæpe per 2 v. 3 aggregatis, contentu homogeneo 1-2 nucleos valde refringentes includente.

Hab. in periostite chronica tibiæ hominis in Germania (BUSSE). — Quoad characteres biolog. et pathol. cfr. Guéguen l. c.

7. **Cryptococcus salmoneus** Sartory, C. R. Soc. de Biol. (1906) et 5928 Bull. Soc. Myc. Fr. XXIII (1907) p. 28 (absque diagn.). — Coloniis in culturis varie roseis; cellulis sphæroideis, levibus, 6-8 μ . diam., sicut in *Saccharomycete* gemmantibus; evolutionis optimum temp. 22°-25°C; ascosporis nullis visis.

Hab. in succo gastrico hyperacido hominis ægrotis, Parisiis.

8. **Cryptococcus linguæ-pilosæ** (Lucet) Vuill. ap. Guéguen, Champ. 5929 paras. pag. 110, fig. 11. — Cellulis ovoideis 3-6 μ . long., tunica tenui, protoplasmate hyalino granulis refringentibus prædito.

Hab. in lingua pilosa nigra hominis in Gallia (LUCET). — Quoad charact. biol. et pathol. cfr. Guéguen l. c.

9. **Cryptococcus lithogenes** (Sanfelice) Vuill. ap. Guéguen, Champ. 5930 paras. p. 111, fig. 12. — Cellulis pro more subglobosis, forma et magnitudine ludibundis, tunica plus minus spissa, subinde capsulâ hyalinâ inclusis, modo guttulas refringentes foventibus, modo masulas rotundo-angulosas calcareas includentibus.

Hab. in gangliis lymphaticis bovis carcinomate necati in Italia (SANFELICE). — Quoad charact. biolog. et patholog. cfr. Guéguen l. c.

10. **Cryptococcus granulomatogenes** (Sanfelice) Vuill. ap. Guéguen, 5931 Champ. paras. p. 111. — Cellulis subglobosis v. leviter ovoideis,

magnitudine variis, contentu modo homoganeo, modo vacuoloso, nucleo centrali refringente præditis, germinantibus.

Hab. in nodulis pulmonum Suis scrofæ, cui noxius, in Italia (SANFELICE). — Quoad char. biol. et pathol. cfr. Guéguen l. c.

11. **Cryptococcus clava** Wedl in Sitzungsab. K. Akad. Wiss. Wien, 5932 XXIX (1858) pag. 91, cum icone. — Cellulis exilibus, elongatis, hyalinis, uno apice leviter clavulato-incrassatis, 30-40 \times 2-3 (apice crassiore), ceterum vix 1 μ . cr., contentu homoganeo, valde refringente, sæpe guttulato sed nucleo distincto nullo præditis, apice crassiore gemmulas 1-2, quarum alteram sæpe tenuiorem exerentibus; cellulis sæpius in catenam connexis.

Hab. in stomacho Bovis in Austria.

12. **Cryptococcus Gotti-Brazzolæ** Guéguen, Champ. paras. pag. 113, 5933 fig. 13. — Cellulis magnitudine variis, sphericis vel subovoideis, contentu granuloso, membrana distincte duplici capsulaque hyalina, homogenea v. stratosæ obtectis.

Hab. in myxosarcomate fossarum nasalium vaccæ, in Italia (GOTTI et BRAZZOLÆ). — Notas biol. et pathol. vide apud Guéguen.

13. **Cryptococcus Tokishigei** Vuill. in Guég. Champ. paras. p. 108, 5934 fig. 8. — Cellulis ovoideis utrinque acuminatis, solitariis, raro apice germinantibus, 3,7-4 \times 2,4-3,6, tunica 1 μ . cr., contentu granuloso, centro nucleato.

Hab. in farcimine seu morva equorum in Japonia (TOKISHIGE). — Notas biolog. et patholog. cfr. apud Guéguen l. c.

14. **Cryptococcus farciminosus** Rivolta et Micellone apud Guéguen, 5935 Champ. paras. p. 109, fig. 9. — Cellulis subrotundis v. ovoideis, interdum utrinque acuminatis, sæpe germinantibus, variae magnitudinis, plerumque 3-4 μ , tunica modo tenui, modo spissa, contentu sæpius granuloso.

Hab. in farcimine (lymphangite) equi, muli et asini in Italia, Gallia, Africa (RIVOLTA). — Quoad notas biolog. et pathol. cfr. Guéguen l. c.

15. **Cryptococcus niger** Vuill. ap. Guéguen, Champ. paras. p. 112. 5936 — Cellulis globosis v. ovoideis, tunica sat spissa præditis, germinantibus et 2-3-connexis; plasmate centrali granum nucleiforme versiforme includente.

Hab. in myxomate pulmonari Caviæ ex inoculatione hepatis foeti tuberculotici in Italia (MAFFUCCI et SIRLEO). — Quoad notas biol. et pathol. cfr. Guéguen l. c.

16. **Cryptococcus parasitarius** (Trab.) Guéguen, Champ. paras. p. 115. 5937
— Cellulis subrotundis, 3-4 μ . diam., guttulis refringentibus refertis, germinantibus.

Hab. in *Acridio peregrino*, socio *Lachnidio* (Fusario) *Acridiorum* in Algeria (TRABUT).

17. **Cryptococcus Anobii** Guéguen, Champ. paras. p. 115, fig. 16. — 5938
Cellulis piriformibus v. clavatis, 4,5 \times 3, extremitate acutiore germinantibus, contentu protoplasmatico granulis refringentibus plurimis, circa vacuolum centrale dispositis referto.

Hab. in cellulis intestini larvarum *Anobii panicei* ubi normaliter vivit, in Germania (W. KARAWAIEW et ESCHERICH). — Notas biologicas cfr. in Guéguen l. c.

18. **Cryptococcus Kleinii** Er. Cohn ap. Guéguen, Champ. par. p. 114, 5939
fig. 15. — Cellulis globulosis, 2-6 μ . diam., contentu homogeneo minute granulato, tunica tenui capsulâ hyalina, diametri totalis quartam partem occupante obvoluta.

Hab. in culturis variis, sociis aliis organismis pathogenis, in Germania (KLEIN). — Quoad charact. biol. et pathol. cfr. Guéguen l. c.

19. **Cryptococcus Bainieri** Sartory, C. R. Soc. Biol. LVIII, 2 (1906) 5940
p. 216. — Cellulis ovoideis v. ellipsoideis, levibus, 6-11 \times 4, more solito gemmantibus; coloniis intense roseis; evolutionis temperatura optimum 24-25°C; ascis hucusque ignotis.

Hab. saprophyticus ad folia maculata subputrida *Urticæ* in Gallia (G. BAINIER). — In cultura liquida cellulæ superficiales longiores et crassiores fiunt.

PSEUDOSACCHAROMYCES Br. et Farn. in Atti Ist. botan. Pavia X (extr. 1906) pag. 31 (Etym. *pseudos* falsus et *Saccharomyces*). — Cellulæ saccharomycetiformes, gemmantes, ellipsoideæ, hyalinae, deinde brunneæ, intus granulosa, in acervulos simplices v. ramosos congestæ. — Genus omnino spurium.

1. **Pseudosaccharomyces Citri** Br. et Farn., l. c. t. VIII, f. 1-2. — 5941
Characteres generis.

Hab. in fructibus *Citri Limonis* morbo s. d. *ruggine bianca* deturpatis, in Sicilia. — Cellulæ 11,5 \times 9.

MYCODERMA Pers., Myc. Eur. I, p. 96 (1822) ex p., Desm., in Ann. Sc. Nat. I sér. X (1827) p. 59, em. Will et Leberle. Cfr. Leberle, Beiträge zur Kenntn. der Gattung Mycoderma. Münch. 1909

(Etym. *myces* fungus et *derma* pellis). — A *Saccharomycete* rite dignoscitur quia ascos et sporidia non generat, fermentationem aceticam non alcoholicam inducit, pelliculas membranaceas superficiales generat, præterea quia constat e cellulis junioribus irregulariter globoso-cuboideis, subtruncatis, numquam exacte globosis v. acutis, demum longiuscule catenatis, breviter cylindraceis, senioribus vacuolis 1-3 et guttulis oleosis 1-3 præditis; cellulis giganteis præsentibus. (Vulgo *Fiori del vino, della birra, Kahmhaut, Fleurs de vin* etc.). — Præter speciem in vino *Mycoderma vini* Desm. (= *Saccharomyces Mycoderma* Rees — Syll. VIII, p. 917, ex parte), sequentes species fuse describit cl. Leberle, quarum tantum nonnullas notas morphologicas hic afferimus.

1. **Mycoderma cerevisiæ** Desm., l. c. em. Hansen, Leberle l. c. p. 73. 5942
— Cellulis germinatis cylindraceis, 7-10 \approx 2-3, longiuscule dendroideo-catenulatis; cellulis giganteis variis; evolutionis lentæ temperatura optimum 20-25°C; gelatinam solanaceam et betaceam fluidificat.

Hab. in cerevisia. — Var. *C* Leberle, l. c. pag. 74: differt cellulis germinatis ex ovoideo cylindraceis, 6-10 \approx 2-4, evolutionis rapidæ temperatura optimum 20-25°C. — In cerevisia.

2. **Mycoderma validum** Will, Centralbl. f. Bakter. II Abt. XXVIII 5943 (1910) p. 30. c. ic., Leberle, l. c. pag. 73. — Cellulis germinatis cylindraceo-ovoideis, 6-8 \approx 2-4, junioribus saccharomycetoideis, senioribus dendroideo-catenulatis; cellulis giganteis valde evolutis; evolutionis vividæ temperatura optimum 20-25°C; gelatinam non fluidificat.

Hab. in Cerevisia vitiata. — Copiose assimilat glycosium, levulosium nec non acidum lacticum; oxydat alcohol ethylicum.

3. **Mycoderma gallicum** Will, Centralbl. f. Bakt. II Abt. XXVIII 5944 (1910) p. 30, c. ic., Leberle l. c. p. 74. — Cellulis germinatis ex ovoideo cylindraceis, 7-10 \approx 2-3, dein dendroideo-catenulatis; evolutionis vividæ temperatura optimum 20-25°C; coloniis giganteis peculiaribus; gelatinam solanaceam et betaceam fluidificat.

Hab. in cerevisia vitiata. — Assimilat glycosium et levulosium, cetera ut in *Mycodermate cerevisiæ*.

4. **Mycoderma decolorans** Will, Centralbl. f. Bakter. etc. II Abt. 5945 (1910) p. 30. — Cellulis plerumque 8-11 \approx 5 e cylindraceo subconoideis, medio constrictulis, ovoideis, apice subapplanatis v. subapiculatis; oxydat fortiter alcohol ethylicum.

Hab. in cerevisia vitiata.

5. **Mycoderma saprogenes-Sake** Takahashi, Bull. Coll. Agric. Imper. 5946 Univ. Tokyo VII (1907) p. 101.

Hab. in fermento vitiatō Sake in Japonia. — Gradui elato alcoholis resistit et illud fortiter oxydat cum formatione acidi carbonici et aquæ.

6. **Mycoderma Humuli** Lasché, Der Braumeister, Chicago (1891) p. 293 5947 et **Mycoderma rubrum** Lasché, l. c. quæ colore rubente et multiplicationis forma peculiari utuntur, teste Leberle, l. c. p. 20 non v. vix spectant ad genus *Mycoderma*.

CICADOMYCES Karel Sulc, Pseudovitellus etc. in Sitzb. Kgl. Böhm. Ges. Wiss. Prag (1910) pag. 11, extr. fig. VI-VII (Etym. *Cicada* et *myces*). — Cellulæ maxime versiformes, subglobosæ, ellipsoideæ, nunc uno apice truncatæ, nunc rectæ, nunc inæquilatæræ, nunc curvatæ, variæ magnitudinis, in series tortuosas breves per connectiva filiformia junctæ, plasmate homogeno, granulis (nucleis?) 1-3 prædito farctæ.

1. **Cicadomyces Ptyeli-lineati** Kar. Sulc, l. c. — Charact. generis; cel- 5948 lulis 6-10 μ . long., granulis (nucleis?) 1-2 μ . diam., subrotundis vel angulosis.

Hab. in cellulis medullaribus larvæ *Ptyeli lineati* ex Homopteris in Bohemia. — Var. II Sulc., l. c. pag. 14, f. VIII. — A typo differt cellulis multo minoribus, circ. 3 μ . long. et connectivis brevissimis. — In iisdem larvis.

2. **Cicadomyces Aphalaræ-Calthæ** Karel Sulc, l. c. pag. 20, fig. XI, 5949 extr. — Cellulis plerumque rhombeis v. trigonis v. elliptico-rhombis, c. 10 μ . diam. connectivis filiformibus plus minus longis junctis, plasma granulosum et corpuscula perexigua numerosa foveantibus, etiam divisione cruciata, ut videtur, se multiplicantibus.

Hab. in cellulis medullaribus larvæ *Aphalaræ Calthæ* ex Homopteris in Bohemia.

3. **Cicadomyces Liberiæ** Buchner, Stud. intrac. Lymb. in Arch. Pro- 5950 tist. Jena (1912) pag. 101, t. 9. — Affinis *Saccharomyceti Cicadarum*; cellulis ovoideis, globulosis v. polymorphis, conglomeratis, 3-8 μ . long.

Hab. in *Cicadæ* spec. partibus periphericis mycetomatis in Liberia Africæ.

4. **Cicadomyces minimus** Buchn., l. c. p. 102, t. 9. — Cellulis mini- 5951 mis, 1,5-3 μ . diam.

Hab. cum priore in Liberia.

5. **Cicadomyces rubri-cinctus** Buchn., l. c. p. 103, t. 11. — *Cicado-* 5952
myceti Aphrophoræ-Salicis similis; cellulis versiformibus plasmate
denso fartis, in mycetomate epithelio rubente cincto nidulantibus.
Hab. in *Aphrophora Salicis* in Germania.
6. **Cicadomyces Aphrophoræ-Salicis** K. Sulc 1910, ap. Buchner l. c. 5953
pag. 102, t. 11. — In interiore mycetomatis nidulans; cellulis in
larvis maturis crassioribus et brevioribus, in insectis perfectis glo-
bosis v. ovoideis, divisione transversa se multiplicantibus, plasmate
demum vacuolato.
Hab. in mycetomate *Aphrophoræ Salicis* in Bohemia et
Germania. — Adest alia generis species **Cicad. Aphrophoræ-Alni** K.
Sulc vocata, sed nec ab hoc auctore neque a Buchner l. c. p. 103
descripta.
7. **Cicadomyces minor** Buchner, l. c. p. 103. — Cellulis 3 μ . diam., 5954
germinando cuneatis, vacuolatis.
Hab. in mycetomate, inter granula flavo-ochracea, *Ptyeli li-*
neati in Germania.
8. **Cicadomyces dubius** Buchner, l. c. p. 104, t. 5, f. 8. — Cellulis 5955
densissime glomeratis, minutis.
Hab. in parte centrali mycetomatis *Psillidæ* cujusdam in
Fraxino, in Germania.

SCHIZOSACCHAROMYCES Lindner (non Beijerinck) — Syll. XI p. 458,
XIV p. 828, XVIII p. 201.

1. **Schizosaccharomyces Aphidis** K. Sulc, *Pseudovitellus* etc. in Sitzung. 5956
K. Böhm. Gesellsch. Prag. (1910) p. 22, fig. XIV extr. — Cel-
lulis subglobosis v. ellipsoideis 4 μ . diam., copulatione in series
breves conjunctis, plasma granulosum cum vacuolis et 1-2 nucleis
continentibus, gemmipare vel divisione transversali se multipli-
cantibus.
Hab. in corpore *Aphidis* ?amenticolæ aliorumque *Aphi-*
dum in Bohemia.
2. **Schizosaccharomyces Aphalaræ-Calthæ** Karel Sulc, l. c. p. 30, f. XII. 5957
— Cellulis perfecte globosis, 4 μ . diam., subinde uno polo minute
apiculatis, solitariis dein copulatione 2-3 plerumque in formam te-
tradis conjunctis, demumque per divisionem radiatam se multipli-
cantibus.
Hab. in cellulis medullaribus larvæ *Aphalaræ Calthæ* in
Bohemia.

3. **Schizosaccharomyces Psyllæ-Försteri** K. Sulc., p. 21, fig. XIII. — 5958
Cellulis regulariter ellipsoideis, mox copulatione 2-4 conjunctis, demum per divisionem se multiplicantibus.

Hab. in cellulis larvæ *Psyllæ Försteri* in Bohemia.

4. **Schizosaccharomyces Chermetis-strobilobii** K. Sulc., l. c. p. 22, f. XV, 5959
extr. — Cellulis subsolitariis, exiguis, fusoides, rectis curvulisve utrinque obtuse acutatis, vix 1-2 μ . long. plasma granulosum cum vacuolis et nucleum singulum continentibus, gemmipare v. divisione transversali se multiplicantibus.

Hab. in corpore *Chermetis (Gnaphalodes) strobilobii* in Bohemia.

5. **Schizosaccharomyces Chermetis-Abietis** K. Sulc., l. c. p. 23, extr. — 5960
Cellulis exiguis, 1-2 μ . long., cylindræis et utrinque rotundatis, 1-nucleatis, divisione transversali tantum se multiplicantibus.

Hab. in corpore *Chermetis Abietis* in Bohemia. — *Schizosaccharomyceti Pombe* affinis dicitur.

6. **Schizosaccharomyces Drepanosiphi** Buchner, Stud. intrac. Symb. 5961
in Arch. Prot. Jena (1912) p. 98, t. 1. — Cellulis globulosis exiguis sed variæ magnitud., 2-4 μ . diam. (in ovis), solitarie v. schizogenetice binis-ternis, plasmate granuloso.

Hab. in Aphidibus (*Drepanosiphis*) in Germania.

7. **Schizosaccharomyces Sulcii** Buchn., l. c. p. 100, t. 8, *Cicadomyces* 5962
Sulcii Buchn. olim.

Hab. in cellulis adiposis *Cicadæ* sp. in Japonia. — Cellulæ globosæ, circ. 3 μ . diam. in ovis, dein schizogenetice constricto-didymæ, varie guttulato-nucleatæ.

SCHWANNIOMYCES Klöcker, C. R. Trav. Labor. Carlsberg VII vol. 4 livr. (1909) p. 271, fig. 4-6 (Etym. a celebri THEOD. SCHWANN). — Sporidia seu endosporæ membrana simplici, extus sparse et minutissime verruculosa et lineola anuliformi æquatoriali percursâ prædita.

1. **Schwanniomyces occidentalis** Klöcker, l. c. pag. 275, fig. 4-6. — 5963
Cellulis plerumque ellipsoideis vel sphæroideis 5-10 μ . cr., raro suballantoideis, temperatura gemmationis 3,5°-38°C; endosporis subellipsoideis 3-4,5 μ . long. uniguttulatis, singulis in quaque cellula rarissime duabus, minutissime verruculosis et æquatorialiter lineolatis.

Hab. ad terram ex ins. St. Thomas Antillarum danicarum. — Fermentationem alcoholicam inducit.

Syll. fung. XXII (II-1913)

DEBARYOMYCES Klöcker, C. R. Trav. Labor. Carsberg VII v., 4 livr. (1909) p. 271, fig. 1-3 (Etym. ab illustri ANT. DE BARY). — Endosporæ seu sporidia membrana simplici, extus sparse et minute verruculosâ prædita.

1. *Debaryomyces globosus* Klöcker, l. c. p. 273, fig. 1-3. — Cellulis 5964 constanter globosis v. subglobosis 4,5-5 μ . diam.; endosporis globulosis in quaque cellula (asco) una rarissime duabus, 2-3,5 μ . d., uniguttulatis, temperatura sporificationis 14°-36°C, gemmationis cellularum 5°-43°C.

Hab. ad terram ex ins. St. Thomas Antillarum danicarum. — In cerevisia fermentationem alcoholicam inducit.

NADSONIA Syd. Ann. Mycol. X (1912) p. 348, *Guilliermondia* Nadson et Konokotine in Bull. du Jard. imp. de Botanique de St. Petersburg, XI (1911) p. 142 c. fig., non Boudier (1904). (Etym. a cl. Prof. G. A. NADSON petropolitano). — Cellulæ ovoideæ, ellipsoideæ vel citrifformes, amycelicæ. Asci e copulatione heterogamica duarum cellularum per apiculos conjugatarum oriundi, globosi, monospori, rarius breviter ellipsoidei bispori. Sporidia perfecte sphaerica episporio minutissime asperulo, flavo-brunneolo prædita et guttula oleosa, crassa, globosâ fosta. — Generi *Debaryomyceti* affinis sed sporogenesis diversa.

1. *Nadsonia fulvescens* (N. et K.) Syd, l. c., *Guill. fulvescens* Nadson 5965 et Kon. l. c. p. 143, fig. 1-40. — Coloniis diu albis, denique asigeris et tunc e rubescenti flavido-brunneolis; cellulis 6-8 \times 4, initio minute granulosis, hyalinis, post sporogenesim vacuis; ascis 7-8 μ . diam., rarius 8-9 \times 6-7; sporidiis in asco monosporo 6 μ . diam., in ascis bisporis 4 μ . diam.

Hab. in fluxu mucoso canis, Petropoli Rossiae. — Cellulæ vegetativæ gemmipare multiplicantur.

WILLIA E. Chr. Hansen — Syll. XVIII, pag. 198 — (Etym. a cl. prof. H. WILL, monacensi). — Huc quoque ducenda: *Willia Saturnus* (A. Kl.) E. Chr. Hans. — Syll. XVIII, pag. 198 et 200 (*Saccharomyces*).

1. *Willia Wichmanni* Zikes, Centralbl. f. Bakter. II Abt. XVI (1906) 5966 p. 97. — Cellulis 3-5 \times 3, in membrana (griseo-alba) usque ad 6-40 μ . long.; ascis 2-4-sporis; sporidiis pileiformibus costulatis, 2 μ . diam. (dempta costula); optimum evolutionis 22°C; ætherem acetium efformat, adsimilat dextrosium et levulosium sed lente.

Hab. culta in substantiis variis ex terra provenientiis.

2. **Willia anomala** E. C. Hans. — Syll. XVIII, p. 198 et XI p. 457 — 5967
var. *belgica* Lindn., Mikrosk. Betriebskontr. 3. Aufl. (1898) p. 382
(Saccharom.), *Will. belgica* (Lindn.) Zikes, Centralbl. f. Bakt. etc.
II Abt. XVI (1906) p. 98. — Cellulis minutis, variis, vacuis, tenuiter tunicatis; endosporis pileiformibus, distincte acute costulatis.

Hab. in cerevisia belgica. — In musto pelliculam punctatam format; ætherem æthylicum non generat.

PICHIA E. Chr. Hans. — Syll. XVIII, p. 198 (Etym. a cl. prof. P. PICHÉ, Scholæ œnologicæ Coneliani). — Huc quoque ducenda *Pichia membranifaciens* C. H. Hans. — Syll. I. c. et VIII, p. 918.

1. **Pichia farinosa** Lindn. Mikrosk. Betriebskontr. IV ed. p. 426, Guill. 5968
lierm. in Ann. mycol. (1910) p. 296, fig. 10. — Cellulis cylindraceo-fusoideis, breviter catenulatis, utrinque obtusulis, per processus laterales binas cellulas conjungentes se copulantibus, denique nucleos quaternos (sporidia) 1-seriatos, globosos foventibus.

Hab. in fermentis Sojæ aliisque.

ZYGOSACCHAROMYCES Barker — Syll. XVI p. 818, XVIII p. 198.

1. **Zygosaccharomyces japonicus** Saito, Bot Magaz. XXIII, pag. 96 5969
(1909), Guilliermond in Ann. Mycol. VIII (1910) p. 293, f. 7. — Cellulis globosis v. globoso-piriformibus, in appendiculam cylindraceam plerumque productis et binis per eam se zygotice conjungentibus, sparsis v. glomeratis, intus 1-4 nucleos (sporidia) generantibus.

Hab. in fermento Sojæ in Japonia. — Ex cellularum conjugatione ad hoc genus spectat, sed ceteræ notæ ulterius inquirendæ.

2. **Zygosaccharomyces Priorianus** Klöcker, Die Gärungsorgan. in Theorie und Praxis der Alkoholgärungsgewerbe, 2 Aufl. Stuttgart, (1906), Guill. in Ann. Mycol. VIII (1910) pag. 294, f. 8-9 — A *Zygosaccharomycete japonico* differt (ex icone cit. Guill.) imprimis cellulis numquam in appendiculam cylindraceam productis, ibidem denique nucleos (sporidia) 2-4 globosos includentibus.

Hab. in fermentatione alcoholica.

3. **Zygosaccharomyces lactis** W. Dombrowski, Centralbl. f. Bakt. etc. 5971
II Abt., 28 Bd. (1910) p. 371, cum icon. — Cellulis sphæroideis plerumque 4-5 µ. diam.

Hab. in lacte fermentescente.

Genera et species dubia v. inquirenda.

Cfr. Leberle, l. c. pag. 20-21, Sule, l. c. et Buchner, l. c.

- Endoblastoderma amycoides** Fischer u. Brebek, Zur Morphologie, Biologie u. Systematik d. Kahmpilze, d. *Monilia candida* Hans. und d. Soorerregers, Jena G. Fischer (1894), 52 pp. cum 4 tab. 5972
- Endoblastoderma pulverulentum** (Beijer.) Fisch. u. Brebek, l. c. 5973
- Blastoderma salmonicolor** Fischer u. Brebek l. c. 5974
- Glukomyces** Beijerinck, Centralbl. f. Bakter. etc. I Abt. Bd. XI (1892) p. 68. 5975
- Kermicola kermesina** K. Sulc. in S. B. böhm. Ges. Wiss. Prag (1906), Buchner, Stud. intracell. Symbionten in Arch. Protistenk. Jena (1912) p. 94, f. 19. 5976
- Hab.* in Kermete *Quercus* ex Coccidiis, in Bohemia. — Cellulæ cylindraceæ, apice subacutæ, 1-3-nucleatæ, $20 \approx 4$; mycelium nullum.
- Kermicola physokermis** K. Sulc., l. c. Buchner, l. c. f. 20. 5977
- Hab.* in Physokermete *Abietis* ex Coccidiis, in Bohemia. — Cellulæ lacrymiformes uno polo v. utrisque acutatae, $10 \approx 3$; mycelium nullum.
- Psyllidiomyces tenuis** Buchner, l. c. p. 97, t. V, f. 4-7. 5978
- Hab.* in cellulis adiposis et lymphæ *Psyllidis* cujusdam in Salice. — Cellulæ cylindraceæ plasmate granuloso farctæ, utrinque obtusulæ, longitudine varia, sed non indicata. Mycelium nullum.
- Lecaniascus polymorphus** Moniez, in Bull. Soc. zool. Fr. XII (1887), Buchner, l. c. p. 97. 5979
- Hab.* in Lecanio *Hesperidum* in Gallia. — Cellulæ ovato-oblongæ, 4-5 μ . longæ. Mycelium 50-60 μ . long., hinc inde contractum. Asci (?) rariores, 40 μ . long., sporidiis ovoideo-oblongis referti.
- Aleurodomyces Signoretii** Buchner, l. c. p. 100, t. 4. 5980
- Hab.* in mycetocystis *Aleurodis* sp. in Germania. — Cellulæ globosæ v. ovoideæ sæpe deformatae, 2-5 μ . long., plasmate granuloso et vacuolato.
- Coccidomyces Pierantonii** Buchn., l. c. p. 102. 5981
- Hab.* in mycetomate *Iceryæ* *Purchasi* ex Coccidiis. — Cellulæ (in culturis) 5 μ . diam., vacuolum unicum continentes.
- Coccidomyces Dactylopii** Buchner, l. c. p. 105. 5982
- Hab.* in mycetomate *Dactylopii* *Citri* in Germania. — Efformat vesiculas cystiformes in quibus cellulæ falciformes numerosissimæ, membrana magis diaphana cinctæ, nidulantur.

Fam. 18. Protomycetaceæ DE BARY

PROTOMYCES Ung. — Syll. VII p. 319, IX p. 363, XI p. 251, XIV p. 829, XVIII p. 202.

1. **Protomyces Crepidis** (Jaap.) Sacc. et Trott., *Protomycopsis Crepidis* Jaap, Ann. Mycol. VI (1908) p. 204. — Pustulis parvis 0,5-0,75 mm., sæpe punctiformibus, rotundatis, numerosis, sordide griseo-flavis, demum flavo-brunneis, in pagina inferiore hemisphærico-prominentibus; sporis irregulariter globosis, 25-36 μ . cr., hyalinis v. pallide flavis; episporio 2-5 μ . cr., verrucis hyalinis crebris sæpe lineariter elongatis tecto, contentu hyalino, granuloso.

Hab. in foliis vivis *Crepidis incarnatæ* prope St. Ulrich et Penegal Mendelgebirge Austriæ. — A *Pr. Leucanthemi* (Syd.) Magn. sporis multo minoribus omnino diversum.

2. **Protomyces gravidus** Davis, Journ. of Mycol. XIII (1907) p. 188. — Sporis subepidermicis vel in zona vasculari ortis, numerosis, plerumque globosis vel etiam ellipsoideis, ovoideis vel polygoniis, 30-55 v. 27-40, plurinucleatis, superficie plus v. minus inæquali, episporio 1-3 μ . cr. brunneo; endosporis maturis 3-5 μ . crassis, hyalinis.

Hab. in ramis, petiolis et nervis plus minusve hypertrophicis *Bidentis cernuæ*, *B. connatæ*, *B. frondosæ* in America boreali.

3. **Protomyces ? Gaillardia** Speg., An. Mus. Nac. Buenos Aires t. XIX (1909) pag. 284. — Maculis obsoletis orbicularibus indeterminatis, amphigenis vix incrassatulo-prominulis, opacis, 2-5 mm. diam., fuscidulis, sæpe areola pallescenti cinctis; sporis solitariis in quaque matricis cellula, globosis, 30-35 μ . diam., crassiuscule tunicatis, levibus, pellucidis, pallide rufescentibus, eguttulatis.

Hab. in foliis vivis *Gaillardia Donianæ* in pratis circa Metán, Salta Amer. austr. — An oogonia *Peronosporæ* v. *Cystopodis* eujusdam?

4. **Protomyces (?) persicifilus** Speg., Rev. Ministerio Agric. Buenos Aires II (1908) n. 2, pag. 39, Nota, cum icon. — Maculis effusis tumidulis, subtorulosis, flavescenti-aurantiacis; sporis in cellulis subepidermicis hypertrophicis parum deformatis, solitariis, globosis, 20-25 μ . diam., crassissime tunicatis, levibus, grosse 1-nucleatis, endoplasmate nubiloso.

Hab. in ramulis *Persicæ vulgaris* quos hypertrophycos reddit, prope La Plata Rep. Argentina. — Forsan inter Chytridiaceas locandus.

5. *Protomyces radiculicola* Zopf, Pilze in Schenk, Handb. IV, p. 280, 5987 f. 4, Wildeman Mém. Soc. Belg. Microscop. XVII (1893) p. 28, t. 2, f. 26-29 et t. 3, f. 26-30. — Mycelio tenui, filiformi, parce ramoso, 4-7 μ . cr., septato, ex exteriori radicis oriundo et inter cellulas matricis penetrante, ibique ramoso; ramis anastomosantibus et appendiculas (haustoria) exerentibus, hinc inde acrogene v. intercalariter se globoso-inflantibus et sporas generantibus; sporis globulosis (sporangiiis?) 28 μ . diam. v. (præcipue intercalaribus) ovato-ellipsoideis, tunica crassa, flava, contentu plus minus refringente.

Hab. in radicibus *Stiftiæ chrysanthæ* cultæ in Germania et *Limosellæ aquaticæ* in Belgio. — Germinatio sporarum nondum observata.

VOLKARTIA R. Maire, Bull. Soc. bot. de Fr. t. LV (1908) p. CXLV (Etym. a Doct. A. VOLKART botanico helvetico). — Sporangia subepidermica, membranâ incrassata, duplici prædita; sporangii maturi membrana externa disrupta, interna sporis repleta protrudente et sacculum ascoideum efformante; sacculis ascoideis hymenium exoascoideum efformantibus.

1. *Volkartia rhætica* (Volk.) R. Maire l. c. pag. CXLVII, *Taphrina* 5988 *rhætica* Volk. — Syll. XVIII, p. 197. — Hypophylla v. amphigena, in foliis plagas bullatas, flavovirentes vel subcarneas efformans; sporangiis subepidermicis, globosis v. subglobosis, 10-25 μ . diam.; sacculis ascoideis ovoideis, oblongis v. cylindraceis, 60-120 \approx 15-25; sporis primitus sphaeroideis, dein oblongis vel oblongo-linearibus, rectis v. curvulis, utrinque rotundatis, continuis, hyalinis, 1-2-guttulatis, 4-7 \approx 1-2; mycelio intercellulari.

Hab. in foliis *Crepididis pygmææ*, blattarioidis, succisæfoliæ in Pyreneis Galliæ et montibus Helvetiæ.

TAPHRIDIUM Lag. et Juel. — Syll. XVIII p. 202.

1. *Taphridium Cicutæ* Lindroth, Mykol. Mitteil. 11-15, in Acta Soc. 5989 pro Fauna et Fl. fenn. XXVI (1904), p. 9, c. ic. — Mycelio hyalino, intercellulari, in mesophyllo late effuso et pustulas rotundatas plus minusve rubidas 1 mm. v. plura longas efformante; cellulis mesophylli hypertrophicis et tunc 45-135 \approx 70-90, rotundato-

ellipsoideis; sporis numerosis, massa sporarum pallidissime flavo-virenti; sporis singulis hyalinis, elongatis, 4-7 μ 1,2-1,8.

Hab. in foliis vivis *Cicutæ virosæ*, Rossia bor. et Fennia.

2. *Taphridium Umbelliferarum* (Rostr.) v. Lagerh. et Juel — f. *Heraclei* Jaap, Verh. Bot. Ver. Prov. Brand. L (1908) p. 30 (nomen nudum). 5990

Hab in *Heracleo Sphondyllo* prope Putels Grödner Tal Tiroliae merid.

MONASCUS Van Tiegh. — Syll. IX p. 373, XIV p. 825.

1. *Monascus Barkeri* Dang., Le Botaniste X (1907) p. 178, t. 32-38, 5991
Kuyper in Ann. Mycol. III (1905) p. 43, tab. II, f. 13-27 (expositio tantum cyto-biologica).

Hab. ex culturis in Asia orient. peractis ad præparationem fermenti cujusdam *Samsu* dicti pro spiritu vini. Cultus quoque in Britannia et Gallia. — Sporangia (?) subglobosa, tunica subanhista; ascus octosporus; sporidia ovoidea rubenti-brunnea, 4-8 μ . long. — Cfr. Barker in Ann. of Bot. XVI (1903) p. 167, tab. XII-XIII.

2. *Monascus olei* Piedallu, in C. R. Acad. Sc. Paris (Aug. 1910) 5992
p. 397, *Mon. purpureus* Piedallu, ibid. (févr. 1909), non de Went. — Peraffinis *Mon. purpureo* de Went et *M. Barkeri*, a quibus differt præcipue characteribus biologicis: evolutionis optimum temp. 30°-40°; germinatio usque ad 46°, nulla ad 47°; coloniis effusis ex albo roseolis v. subviolaceis, in substrato lacteo mox rubris.

Hab. in fundo dolii oleo, vulgo dicto japonico, referti et in coriis oleo perfectis in Gallia.

MYXOMYCETÆ (*)

Syll. VII p. 323, X p. 83, XI p. 462, XIV p. 831, XVI p. 819, XVIII p. 208.

Fam. 1. Myxomycetaceæ WALLR.

BADHAMIA Berk. — Syll. VII p. 329, X p. 83, XVI p. 819, XVIII p. 208.

1. *Badhamia foliicola* List., Journ. of Bot. XXXV (1897) p. 209, Torrend Myxom. p. 210, t. 6, f. 11. — Plasmodio flavo-aurantiaco; peridiis subglobosis, subinde piriformibus, agglomeratis vel laxe gregariis, 0,5-1 mm. diam., griseo-cyaneis, sessilibus v. stipite tenui, 0,2-0,5 mm. longo præditis, brunneo-aurantiis, tunica calce experte; capillitio albo, parcissime calcifero; sporis liberis v. interdum 3-6-glomerulatis, violaceo-brunneis, 11 μ . diam., tenuiter echinulatis: 5993

Hab. in foliis emortuis, fragmentis variis etc. in Britannia, Germania, Lusitania.

2. *Badhamia orbiculata* Rex, Proc. Philad. Acad. (1893) pag. 372, 5994
Macbride Slime Moulds p. 66, t. 14, f. 4, Torr. Myxom. p. 208,

(*) De hac singulari familia post sapientem ejus fundatorem J. ROSTAFINSKI, eheu a septem lustris silentem, bene et ex professo tractaverunt ARTH. LISTER, THOM. H. MACBRIDE, CAM. TORREND alique; nunc vero (1911) opus apparuit ceteris splendidius, nempe *A Monograph of the Mycetozoa*, II ed., ab ipso ARTH. LISTER b. m. concinnatam, adjuvante vero et edente ejus filia GULIELMA, tabulis CCI pulcherrimis, plerisque coloratis, ornatam et absolutissimam. Omnibus qui in perdifficili familiae studio incumbere velint opus Listerianum tutissime commendamus.

Pars *Sylloges*, ad Myxomycetes spectans et jam senescens, fere tota nunc reficienda esset, sed optimis monographiis jam nunc, ut dixi, uti possumus. Hic tantum damus non modo diagnoses specierum novarum sed, et non paucas, specierum in voluminibus præcedentibus fortuito omissarum.

t. VI, f. 12. — Plasmodio?; peridiis orbiculari-discoideis v. irregulariter elongatis et plasmodiocarpicis, 1 mm. circ. latis, sæpe breviter stipitatis et tunc supra subumbilicatis; tunica grisea, sæpe granulis calcareis farcta, deorsum brunnea; stipite nullo v. brevissimo, nigro, ruguloso; capillitio albo; sporis nigro-violaceis, tenuiter verrucosis, 12-15 μ . diam.

Hab. ad ligna emortua in America boreali.

3. *Badhamia rubiginosa* (Chev.) Rost. — Syll. VII, p. 334 — var. 5995
globosa List. ap. Torrend Myxom. p. 212. — Peridiis subglobosis, leniter depressis, 0,7 mm. diam., e griseo purpurascens; capillitio interdum parce calcifero; stipite atro-brunneo, 0,5-1 mm. long.; columella atro-brunnea, claviformi; sporis valide verrucosis v. reticulatis.

Hab. ad Muscos in Britannia et Hibernia.

PHYSARUM Pers. — Syll. VII p. 336, X 84, XI p. 462, XIV p. 831, XVI p. 819, XVIII p. 209.

1. *Physarum variabile* Rex, Proc. Philad. Acad. (1893) p. 371, Torr. 5996
Myx. p. 188. — Plasmodio?; peridiis totis 1 mm. alt., sparsis v. aggregatis, ovoideis v. piriformibus, interdum plasmodiocarpis sessilibus v. stipitatis, 0,4-0,5 mm. lat., rugosis, nitidulis, flavo-olivaceis, ochraceo-brunneis; tunica membranacea crusta calcarea flavicante et caduca secedente, irregulariter dehiscens; stipite longitudine et colore vario, 0,3-0,4 mm. longo, albo v. flavido, subinde atro-brunneo, sæpius olivaceo, granulis calcareis albis referto, capillitio e filamentis reticulatis, hyalinis, axillis dilatatis, nodulos calcareos albos v. flavidos conjungentibus; columella nulla v. subnulla; sporis minute verrucosis, atro-violaceis, 9-10 μ . diam. — var. *sessile* List., Journ. of Bot. (1898) tab. 385, fig. 2: peridiis omnino sessilibus.

Hab. cum var. ad ligna emortua in America boreali et australi et in Suecia.

2. *Physarum murinum* Lister, Mycetoza p. 41, t. VII, f. B, ed. II, 5997
p. 50, t. 18, Torr. Myxom. p. 185. — Plasmodio?; peridiis globosis v. subglobosis, brunneo-griseolis v. murinis, sparsis v. gregariis, rugulosis; stipite 0,5 mm. alt. v. amplius, pallide brunneo, recto, subinde subfusoides, fragili, granulis calcareis farcto; columella brevi, hemisphærica v. obtuse conica; capillitii diu persistentis floccis hyalinis, nodulos calcareos copiosos pallide brunneos v.

flavos connectentibus; gleba brunnea; sporis brunneo-violaceis v. lilacinis, sublevibus, 6,5-10 μ . diam.

Hab. ad ligna emortua in Britannia, Suecia, Helvetia, Amer. bor. — Var. *Ravenelii* (Morg.) Torr. l. c. *Cytidium Ravenelii* Morg. Myx. Miami Valley, p. 82. — Nodulis calcareis flavis; stipite fusoides; sporis 6,5-7,5. — Ad ligna in Amer. bor.

3. *Physarum compactum* (Wing.) List. Mycetozoa p. 44, t. 10, f. B, 5998
Torrend Myxom. p. 191, t. VI, f. 8, *Tilmadoche compacta* Wing. Proc. Philad. Acad. (1889) p. 48, *Lepidoderma stellatum* Masee, Myxog. p. 252. — Plasmodio?; peridiis totis 1-2 mm. altis, gregariis, globulosis v. infra applanatis, 0,5 mm. diam., rectis v. nutantibus, albis v. griseo-brunneolis albo-maculatis, tunica membranacea, glomerulis calcareis innatis numerosis onusta, maturitate in 6-12 segmenta petaloidea dehiscente; stipite albo v. albo-flavido, subinde basi nigricante, 0,5-1,5 mm. alt., sursum tenuato, superne granulis calcareis farcto, columella e grumo granulorum calcareorum, supra apicem stipitis sito constante; floccis e grumo radiantibus, incoloribus, copiosis, parce calcareo-nodulosis, nodulis minutis fusoides; gleba brunnea; sporis brunneo-violaceis, minute verrucosis, 7-8 μ . diam.

Hab. ad ligna putrida in Amer. bor. et centrali et Borneo.

4. *Physarum Betheli* Macbr. ap. Lister, Mycetoz. II ed. p. 57, t. 200. 5999 (1911). — Plasmodio; peridiis stipitatis, subglobosis, infra umbilicatis erectis v. inclinatis, 0,5-0,7 mm. diam., pallide sulphureis v. (ubi calce expertibus) iridescenti-violaceis; tunica membranacea granulis calcareis sulphureis plus v. minus copiosis farcta; stipite firmo atro-brunneo v. nigro, 0,1-0,5 mm. alto; columella nulla; capillitii floccis hyalinis, dense reticulatis, nodulis calcareis subinde ramosis pallide sulphureis inspersis; sporis violaceo-brunneis, minute verruculosis, 9-10 μ . diam.

Hab. ad ligna putrescentia, Colorado Amer. bor. — Affine *Physaro viridi* var. *incano*.

5. *Physarum psittacinum* Ditm. — Syll. VII, p. 341 — var. *fulvum* 6000 List., Journ. of Bot. XLIV (1906) p. 228, Torr. Myx. p. 195. — A typo dignoscitur tantum stipite basique peridii fulvis, nec æqualiter aurantio-rubris.

Hab. ad truncos vetustos in Japonia.

6. *Physarum galbeum* Wingate in Ell. et Ev. N. Am. Fgi. n. 2491, 6001 Macbride Amer. Slime-Moulds p. 53, Torrend Myxom. p. 194. — Ab affini *Physaro flavicomo* distinguitur peridiis aureo-flavis, gra-

nulis calcareis conspicuis inspersis; stipite pallide brunneo v. succineo, opaco nec non floccorum nodis minoribus; sporis sublevibus, lilacinis v. violaceis, 7,5-10 μ . diam.

Hab. ad ligna emortua in America boreali.

7. **Physarum penetrale** Rex, in Proc. Philad. Acad. (1891) p. 389, 6002 List. Myceto. p. 49, t. XIV A, Torr. Myxom. p. 201, t. IX, f. 11. — Plasmodio?; peridiis sparsis v. gregariis, rectis, ellipsoideis v. piriformibus, 0,5-07 mm. alt., 0,3-05 mm. lat., raro globulosis, griseis v. pallide flavo-viridulis; tunica membranacea, semidiaphana, granulis calceis pallide flavis v. griseolis inspersa, usque ad basim in segmenta 2-4 fatiscente; stipite variabili, tenui, subulato diaphano, atro-rubro v. rubro-aurato, in columellam flavo-rubentem, acuminatam, $\frac{1}{5}$ peridii attingentem producto; capillitio copioso persistente, nodulis subrotundis flavis sæpius calcareis insperso; gleba brunnea; sporis sublevibus, violaceo-brunneolis, 5-7 μ . diam.

Hab. ad ligna emortua, Muscos, Pinorum folia etc. in America bor., Britannia, Germania, Lusitania.

8. **Physarum citrinellum** Peck, Rep. St. Mus. New Y. XXII (1879) 6003 p. 89, *Craterium citrinellum* (Peck) Lister, Mycetozoa p. 74, t. 28, f. B, *Physarum cæspitosum* Schw. Syn. N. Am. Fungi pag. 258 (verisimiliter) — Syll. VII, p. 350 — Torr. Myxom. p. 192. — Plasmodio?; peridiis totis 1-1,5 mm. alt., subglobosis, gregariis v. sparsis, flavo-citrinis v. ochraceis, basi aurantio-tinctis; tunica duplici, exteriori cartilaginea, flava ex granulis calcareis copiosis rugulosa, ab interiore facile secedente; stipite cylindrico, 0,3-0,4 mm. long. valido, plicato, rubro-aurantio v. fuligineo, diaphano; capillitii floccis hyalinis, ramosis, nodulis latis calcareis albis præditis, gleba nigra; sporis brunneo-purpureis fortiter echinulatis, 10-12 μ . diam.

Hab. ad ligna emortua et ad Muscos in Amer. bor. et in Japonia.

9. **Physarum carneum** G. Lister, Journ. of Bot. 48 (1910) p. 73. — 6004 Peridiis sparsis, stipitatis, subglobosis, 0,4-0,6 mm. diam., ochraceis, levibus v. rugulosis; pariete membranaceo, pallide flavo, cumulis calcareis granuliformibus, ad basim crassioribus consperso; stipite rubro-carneo, diaphano, striato, calce carente, 0,2-0,3 mm. alto; columella minuta, conica aut nulla; capillitio dense reticulato-floccoso, floccis anguloso-ramosis hyalinis, calcareo-nodosus, ramis brevibus hyalinis connectentibus; sporis globosis, purpureo-brunneis, spinulosis, 8 μ . diam.

Hab. ad ligna putrida, Colorado Springs Amer. bor. (STURGIS).

10. *Physarum nucleatum* Rex, Proc. Philad. Acad. (1891) pag. 389, 6006

Lister, Mycetoz. p. 49, Torr. Myxom. p. 191. — Plasmodio?; peridiis totis 1-2 mm. alt., sparsis v. gregariis, globulosis, rectis v. nutantibus, 0,5 mm. latis, albis; tunica membranacea, irregulariter dehiscente, glomerulis calcareis innatis v. inspersis prædita; stipite subulato, albo-flavido, rugoso, 1 mm. alto; columella nulla; capillitio niveo-albo, circa nucleum calcareum nitidum ad stipitis summitatem situm disposito, nodulisque minutis, albis, subrotundis prædito; gleba nigra; sporis brunneo-violaceis, minute echinulatis, 6-7 μ . diam.

Hab. ad ligna emortua in America boreali, Antillis, Japonia.

11. *Physarum nutans* Pers. — Syll. VII, pag. 359 (*Tilmadoche*) — 6006

var. β *violascens* Rost., Monogr. p. 114. — Peridio cyanescente v. violaceo, fragili, nutante, crusta calcarea superficiali nulla; stipite longiusculo; sporis 8-9 μ . diam. — var. γ *robustum* Lister, Mycetoz. p. 51. — Peridio granulis calcareis referto, persistente; stipite valido, recto, brevi v. nullo; capillitii nodis latioribus, 20-50 μ . diam., interdum in centrum peridii confluentibus; plasmodiocarpis non raris; sporis evidentius verrucosis, 9-11 μ . diam.

Hab. ad caudices et ligna emortua, β in Germania et Lusitania, γ fere ubique.

12. *Physarum crateriforme* Petch, Ann. R. Bot. Gard. Peradeniya 6007

IV, Pt. V (1909) pag. 304. — Peridiis stipitatis, plasmodiis interdum accedentibus; capitulis crateriformibus 0,5-0,7 \approx 0,3-0,4 mm. v. sphaericis 0,5 mm. diam., subinde depressis, albis, pulvere calcareo-denso conspersis v. griseis, modo nudatis et iridescentibus; stipite opaco conico, infra nigro, sursum albido, 0,3-0,7 mm. long. 200 μ . basi cr., 80 μ . apice, in columellam densam, albam, producto, interdum columella nulla; nodulis calcareis ad apicem peridii extensis spinulas horizontales 80-100 \approx 20-40 ferentibus, membrana peridii hyalina granulos calcareos includente; sporis sphaericis dense spinulosis, violaceo-brunneis, 11-15 μ . diam.

Hab. in cortice vivo *Artocarp*i integrifolii, rarius in ramulis dejectis, Peradeniya Ceylon; ad truncos *Araucariæ*, *Thuyæ* etc. in Lusitania. — *Phys. nutanti* v. *leucophææ* proximum.

13. *Physarum vernum* Somm. ap. Fr. S. M. III, p. 146, sec. List., 6008

Mycetoz. II ed. p. 75, t. 48, *Badhamia verna* Rost. Mon. p. 145 ex p. — Plasmodio albo; peridiis sessilibus, subglobosis, interdum plasmodiocarpicis, oblongis, griseo-albis, 0,5-1 mm. diam., interdum

plura mm. longis, rugulosis; tunica membranacea, pro more granulis calcareis dense referta, interdum (calce absente) iridescente; capillitii floccis brevibus, hyalinis, nodulis copiosis, angulosis, albis connectentibus centroque pseudo-columellam sæpe formantibus; sporis purpureo-brunneis, spinulosis, 9-12 μ . diam.

Hab. in foliis ramisque dejectis in Britannia, Norvegia, Helvetia, Italia, Austria, Lusitania et Cuba. — *Badhamia verna* Rost. ex p. ad *Badh. paniceam* referenda est.

14. **Physarum testaceum** Sturgis, Colorado Coll. Publ. Gen. Ser. n. 30 6009 (1907) Science ser. XII, p. 18, Lister, Myceto. II ed. p. 79, t. 54. — Plasmodio?; peridiis sessilibus albis, subglobosis, confertis mutuaque pressione polygoniis, 0,7 mm. diam.; tunica exteriore alba, ovi crustæ simili, ab interiore membranacea incolore secedente; capillitio ex nodis calcareis, modo majoribus modo minoribus, albis, angulosis ramosisque constante floccisque connectentibus brevibus; sporis purpureo-brunneis v. griseo-purpureis, spinulosis, 8-10 μ . diam. uno latere conspicue magis spinulosis et saturatoribus.

Hab. ad ligna emortua, Colorado, Ohio, Massachusetts, Vermont, Maine Amer. bor.

15. **Physarum virescens** Ditm. — Syll. VII, p. 341 — var. β **nitens** 6010 List., Myceto. p. 59, Torr. Myxom. p. 182. — Peridiis subglobosis, majoribus quam in typo, 0,5-0,8 mm. diam., gregariis v. solitariis, vivide flavis, parum calcigeris; sporis 7-9 μ . diam. — var. γ **obscurum** Lister, Myceto. p. 59, Torr. Myxom. pag. 182. — Peridiis subglobosis discretis, levibus, brunneo-olivaceis, 0,5 mm. diam., sæpe plasmodiocarpicis; sporis 6-8 μ . diam.

Hab. in foliis vel lignis putridis, β in America boreali, γ in Britannia et Hungaria.

16. **Physarum alpinum** G. Lister, Journ. of Bot. 48 (1910) pag. 73, 6011 *Ph. virescens* var. *alpinum* List., Journ. of Bot. 46 (1908) p. 216. — Peridiis sessilibus, confertis, subglobosis 1-1,3 mm. diam. v. plasmodiocarpia 2-10 mm. longa formantibus, flavo-ochraceis, levibus v. squamulosis; peridii pariete duplici, exteriore calcareo ab interiore facile secedente; capillitii nodulis calcareis crassiusculis, simplicibus v. ramosis, flavis, floccis firmis hyalinis connexis; sporis globosis purpureo-brunneis, minute verrucosis, 10-15 μ . diam.

Hab. ad folia, gramina in alpinis California, (HARKNESS), Arolla Valesiæ (LISTER), Ste. Croix Jura (MEYLAN). — A *Phys. virescenti* probe distinctum.

PHYSARELLA Peck — Syll. VII p. 352.

1. *Physarella lusitanica* Torrend, Myxom. p. 173, t. IX, f. 12. — 6012
Ab affini *Phys. mirabili* Peck (= *Ph. oblonga* (B. et C.) Morg.) differre videtur peridiis lenticularibus nec breviter cylindraceis, irregulariter dehiscentibus, nec stellatim laciniatis, stipite brevi 0,3-0,5 mm. alto, nec peridio duplo triplove longiore, floccis expansionibus calcareis fusoideis carentibus.

Hab. in cortice et foliis acervatis *Eucalypti* globuli, Alente Lusitaniæ. — Peridium 0,4-0,6 mm. lat., 0,2-0,3 mm. cr.

CRATERIUM Trent. — Syll. VII p. 355, XI p. 463, XIV p. 834.

1. *Craterium concinnum* Rex, Proc. Philad. Acad. (1893) pag. 370, 6013
Torr. Myxom. p. 176. — Plasmodio?; peridiis totis 0,5-0,7 mm. alt., subinfundibuliformibus, levibus, brunneo-olivaceis, sæpe apice pallidioribus, operculo conspicuo convexo albido dehiscentibus; tunica cartilaginea; stipite 0,1-0,3 mm., atro-brunneo, ruguloso; capillitio ex nodulis calcareis minutis angulosis, granulis brunneo-ochraceis repletis constante; sporis pallide brunneis, tenuiter verrucosis, 9-10 μ . diam.

Hab. in spinis involucri *Castaneæ*, socio *Lachnobolo globoso*, in America boreali.

2. *Craterium paraguariense* (Speg.) Sacc. et Trott., *Didymium paraguayense* Speg., F. Guar. I (1883) pag. 141, *Craterium rubescens* Rex, Proc. Philad. Acad. (1893) pag. 370, Macbr., Slime-Moulds p. 75, *Jocraterium paraguayense* (Speg.) Torr. Myxom. p. 174. — 6014
Plasmodio?; peridiis totis 1-1,5 mm. alt., longe cyathiformi-cylindraceis, rectis, gregariis, 0,6 mm. latis, vivide violaceis, vittis vel reticulis pallide violaceis variegatis; stipite cylindraceo, 0,4 mm. alt., 0,7 mm. cr., opace purpureo, ex hypothallo discoideo oriente; tunica cartilaginea, granulis calcareis copiosis, subreticulatim dispositis farcta; columella e nodulis calcareis ad centrum concretis formata; capillitio e nodis calcareis violaceis inter se filamentis violaceo-hyalinis conjunctis; sporis sublevibus, violaceis, 7-9 μ . d.

Hab. ad folia, cortices putres, Paraguay, Amer. austr. et in Amer. bor.

LEOCARPUS Link — Syll. VII p. 358.

1. *Leocarpus fulvus* Macbr., Amer. Slime-Moulds, pag. 82, t. XVI, 6015
f. 4, Torr. Myxom. p. 171, t. VII, f. 7, *Physarum fulvum* List., Mycetoz. II ed., p. 60, t. 66. — Plasmodio flavo; peridiis grega-

riis, ovoideis v. globulosis, rubidis v. pallide flavis, irregulariter dehiscentibus; tunica exteriore plus v. minus calcifera; basi in cupulæ formam persistente, tunica interiore tenuissima vix visibili; stipite longo striato, rufo; hypothallo distincto sinuoso, plus vel minus continuo; capillitio copioso pallido v. albo, nodulis calcareis latis flavidis insperso; gleba nigra; sporis atro-brunneis, echinulatis, 13-15 μ . diam.

Hab. in foliis et fragmentis putrescentibus in America bor.

CHONDRIODERMA Rost. — Syll. VII p. 362, X p. 85, XI p. 464, XIV p. 834, XVI p. 822, XVIII p. 210.

1. *Chondrioderma roanense* Rex, Proc. Philad. Acad. (1893) p. 368, 6016 Torr. Myx. p. 167. — Plasmodio?; peridiis sparsis, disciformibus v. leviter convexis, sæpe infra umbilicatis, saturate brunneis, 1 mm. diam.; tunica externa levi, fragili, irregulariter fatiscente, interiore alba punctata, stipite curto, nigro-piceo, longitudinaliter sulcato; hypothallo nullo; columella disciformi, pallide ochracea, capillitii floccis paucis subincoloribus, flexuosis, simplicibus v. furcatis, subinde anastomotidis; sporis atro-violaceis, verrucosis, 12-14 μ . diam.

Hab. in lignis putrescentibus in America boreali.

2. *Chondrioderma rugosum* Rex, Proc. Philad. Acad. (1893) p. 369, 6017 Torr. Myx. pag. 168, t. V, f. 26. — Plasmodio cinereo; peridiis sparsis v. aggregatis, 0,5-0,6 mm. diam., albis v. griseis, superficie tota rugulis decussatis et areolas 25-30 polyhedralas formantibus percursa; tunica simplici granulis calcareis plus v. minus referta; stipite subulato, nigricante, peridium subæquante; hypothallo nullo; columella elata, alba, globulosa; capillitii floccis albis v. incoloribus, furcatis v. anastomotico-reticulatis; sporis brunneo-violaceis, 8-10 μ . diam.

Hab. ad Muscos in Amer. bor. et insul. Antillis.

3. *Chondrioderma montanum* Meylan, Bull. Soc. bot. Genève (1910) 6018 p. 262. — Plasmodio?; sporangiis stipitatis, raro sessilibus, albis v. roseis, 1 mm. lat.; peridio duplici; cute externa fragili, calcarea; cuticula interna membranacea, ab externa separabili; stipite flavo-brunneo 0,5 mm. alto; columella sphaerica, magna v. parva, brunnea subinde rufo-brunnea, raro pallida; capillitii tubulis paucis, ramosis, non flexuosis, brunneo-violaceis; sporis globosis, 7-9 μ . diam., brunneo-purpureis, levissime spinulosis.

Hab. ad truncos putres, præsertim fagineos in silvis Jura Helvetiæ. — Inter *Chondr. radiatum* et *Ch. testaceum* fere medium.

COLLODERMA G. Lister, Journ. of Bot. 48 (1910) pag. 312 (Etym. *colla* gluten et *derma*). — Peridia subglobosa, pariete bistratoso; exteriore gelatinoso, cumulis granuliformibus excretæ materiei minutisque granulis calcareis consperso; interiore membranaceo. Capillitium e reticulo floccosum anastomotico-ramosorum purpurascens, absque nodulis calcareis constans. Sporæ brunneo-purpureæ.

1. *Calloderma oculatum* (Lippert) G. Lister, l. c., *Didymium oculatum* C. Lipp., Verhandl. k. k. zool. bot. Gesellsch. Wien, XLIV (1894) p. 72, t. IV — Syll. XI, p. 464.

Hab. in ligno putrescente abietino et inter Muscos in Austria (LIPPERT) et Britannia (W. CRAN). — Peridia 0,5-0,7 mm., sessilia v. raro breve pedicellata, olivaceo-brunnea vel purpureo-brunnea; capillitium purpurascens-brunneolum, extremitatibus hyalinum, basi 2-4 μ . cr.; sporæ spinulosæ 11-13 μ . diam.

PHYSARINA v. Höhn., Stzb. K. Ak. d. Wiss. Wien, CXVIII, Abt. I (1909) p. 431 (Etym. a *Physaro* cui affinis). — Peridia stipitata, membranacea, verrucis calcareis cylindraceis conspersa. Capillitium calce carens, tenuiter filiforme. Stipes in columellam excedentem globosam abiens, granulis calcareis, æque ac columella, refertus. Sporæ violaceæ.

1. *Physarina echinocephala* v. Höhn., l. c. p. 432, cum icon., List., 6020 Mycetoz. II ed. pag. 117, t. 198. — Gregaria, circ. 800 μ . alta; capitulo circ. 500 μ . diam., globoso-depresso, theobromino-nigricante, verrucis conspicuis cylindraceo-clavatis, 80-100 \times 40-60, roseo-cinereis consperso; stipite albo 400-420 \times 200-250, ruguloso-granuloso; floccis radiantibus erecto-ramosis, vix reticulatis, violaceis; sporis globosis sublevibus, atro-violaceis, 8-9 μ . diam.

Hab. in caulibus putrescentibus, Buitenzorg ins. Javæ.

DIACHÆA Fr. — Syll. VII p. 387, XI p. 465, XIV p. 835.

1. *Diachæa cylindrica* Bilgram, Proc. Ac. Nat. Sc. Philadelphia LVII (1905) p. 524, Torrend Myxom. p. 147. — Plasmodio?; peridiis cylindraceis stipiteque calce carentibus; sporis minutis reticulatis.

Hab. ad fragmenta vegetabilia in America boreali. — Sporis

reticulatis peridiisque cylindricis a ceteris generis speciebus facile dignoscitur.

DIACHÆELLA v. Höhn., Stzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I (1909) p. 436 (Etym. *Diachæa*, cui affinis). — Peridia stipitata. Stipes cum columella in peridium intrans, glomerulis crystallinis, majusculis, subrotundis refertus. Peridii membrana tenuis, non fragilis, calce carens; stipitis membrana tenuis, molliuscula, calce non v. vix prædita. Capillitium nodulis calcareis experts. Sporæ violaceæ. — Teste List. Myceto. II ed., p. 119 genus non satis validum et a *Diachæa* non separandum.

1. *Diachæella bulbillosa* (Berk. et Br.) v Höhn. l. c. p. 436, f. 34, 6022
Didymium bulbillosum B. et Br. — Syll. VII, p. 384 — *Diachæa bulbillosa* Lister in Penzig Myx. Buitenz. (1898) p. 47.

Hab. in foliis siccis, Ceylon, Java. — Stipes opace albus, 400-500 v 150-200; peridium nigricans e globoso ovoideum 350-400 μ . lat. Capillitii hyphæ reticulato-ramosæ 1-1,5 μ . cr.; sporæ griseo-violaceæ inæqualiter globosæ et irregulariter verrucosæ, 8-8,5 μ . d.

DIDYMIUM Schrad. — Syll. VII p. 375, X p. 85, XI p. 464, XIV p. 835, XVI p. 822, XVIII p. 210.

1. *Didymium Wilczekii* Meyl., Bull. Soc. Vaud. Sc. nat. XLIV (1908) 6023 p. 290. — Plasmodio cinereo, dein saturate cinereo; peridiis albis v. griseolis, semper plasmodiocarpii forma, 1-8 cm. long, 2-8 mm. lat, 0,3-0,5 mm. cr., tunica tenui incolore v. grisea, stellis calcareis majoribus et minoribus v. baculis v. granulis sphaericis (stratum continuum et separabile non formantibus) obducta; capillitio purpureo-brunneo, copioso, floccis verticalibus, valde ramoso-anastomoticeis, subinde reticulum fere formantibus, æqualibus, extremitate decoloratis, non acutatis; columella nulla; sporis globosis, 9-12 μ . diam., tenuiter spinulosis, saturate purpureo-brunneis.

Hab. in ramis caulibusque vetustis Rubi idæi, Urticæ, Ribis, Loniceræ sub nive deliquescente, alt. 1000-1400 m. in Jura Helvetiæ.

2. *Didymium leoninum* B. et Br., Ceyl. Fungi n. 750, p. 83 (1875) 6024 Torrend, Myxom. p. 156. — Plasmodio?; peridiis totis 1-2 mm. alt, subglobosis, infra planis v. umbilicatis, griseis, tunica cartilaginea aurantiaca v. brunneo-aurantiaca, areolata; stipite concolore, firmo, 0,2-0,4 mm. cr., granis calcareis farcto; columella quoque concolore; capillitio copioso, floccis plus v. minus flexuosis, parce ra-

mosis, brunneo-purpureis vel griseis; sporis e griseo rubentibus, minute spinulosis, 8-13 μ . diam.

Hab. ad cortices, Muscos etc. in ins. Ceylon et Java. — Speciem jam dubiam nuperius recognovit cl. Petch.

3. *Didymium squamulosum* (Alb. et Schw.) Fr. — Syll. VII, p. 377 6025
— var. *claviforme* Sturgis, Colorado Coll. Publ. Gen. Ser. n. 30, (1907), Science ser. XII, n. 1.

Hab. ad ligna etc. putrescentia in Colorado Amer. bor. — Varietas quæ probabiliter peridio clavato esset dignoscenda, in List. Myc. II ed. omitta est.

SPUMARIA Pers. — Syll. VII p. 388, XVIII p. 211.

1. *Spumaria alba* (Bull.) DC. — Syll. VII, pag. 388. — var. *solida* 6026
Sturgis, Colorado Coll. Publ. Gen. Ser. n. 30 (1907), Science Ser. XII, p. 29, Lister, Mycetoz. II ed. p. 138. — Plasmodiocarpis pulvinatis, compactis, 4-5 cm. diam., crystallis calcareis minutis, sæpe nodulosis; capillitio parco, irregulari, hyalino; sporis spinulosis, 9-11 μ . diam.

Hab. in foliis, culmis putrescentibus udis, Colorado Amer. bor.

LEPIDODERMA De Bary — Syll. VII p. 386, XI p. 465.

1. *Lepidoderma Carestianum* Rost. — Syll. VII, p. 387 — var. *flaves- 6027*
scens Meylan, Bull. Soc. Vaud. S. N. XLIV (1908) pag. 292. — Columella et facie interiore tunice saturate flavis; granulis calcareis griseo-flavidis; sporis 9-11 μ . diam.

Hab. in ramis Rubi idæi, Jura Helvetiæ.

LEPIDODERMOPSIS v. Höhn. Stzb. k. Ak. d. Wiss. Wien CXVIII, Abt. I (1909) p. 438 (Etym. *Lepidoderma*, cui affinis). — Peridia stipitata, membrana rigidula, cartilaginea, glomerulis stellatis calcareis conspersa. Stipes calce expers, subspongiosus, axi firmiore præditus, apice in columellam globosam granulis calcareis præditam desinens. Capillitium nodulis calcareis expers. Sporæ violaceæ. — A gen. *Didymio* sensu List. vix distinguendum.

1. *Lepidodermopsis leonina* (B. et Br.) v. Höhn., l. c. fig. 35, *Didy- 6028*
mium leoninum B. et Br., List. Mycetoz. II ed. pag. 136, t. 113, *Lepidoderma tigrinum* Rost. p. p. — Syll. VII, p. 386.

Hab. in caulibus emortuis in ins. Ceylon et Java. — Peridium e flavo leoninum, 680 μ . diam. extus glomerulis stellato-spinosis calcareis 40-60 μ . diam. conspersum; stipes 600 \approx 200; capillitium

radians vix ramosum, violaceum, ex floccis 1-1,5 μ . cr. formatum; sporæ violaceæ v. violaceo-griseæ, 7-9 μ . diam., ubique minute verruculosæ.

STEMONITES Gled. — Syll. VII p. 397, X p. 87, XI p. 466, XIV p. 836, XVI p. 823, XVIII p. 211.

1. **Stemonites fusca** (Roth) Rost. — Syll. VII, p. 397 — var. β ni- 6029
grescens Rex, Proc. Philad. Acad. (1891) p. 392) (ut sp.), Torr. Myx. p. 141. — Stipite brevissimo, vix 0,5 mm. longo; peridio saturatius nigricante; sporis spinulosis v. reticulatis, 8 μ . diam. — var. γ **maxima** Schw. N. Am. Fungi p. 260 (ut sp.), Torr. Myx. p. 140. — Peridiis majusculis, 10-15 μ . long.; sporis atro-violaceis, distincte reticulatis, 5-8 μ . diam.; capillitii areolis 14-50 μ . diam.; sporis 8-10 μ . diam. — var. δ **trechyspora** Berk., Torr. Myx. p. 141. — Sporis 10-12 μ . diam. fortiter reticulatis, costulis 1 μ . alt.

Hab. in truncis et caudicibus putrescentibus: β et γ in America boreali, δ in Venezuela.

2. **Stemonites pallida** Wing. in Ell. et Ev. N. Am. Fungi n. 3498, 6030
 Torr. Myx. p. 144, Macbr. Am. Slime Moulds p. 123, t. XIII, f. 3 et XVIII, f. 2. — Plasmodio?; peridiis totis 4-6 mm. alt., gregariis, rarius cæspitulosis rectis, cylindricis, obtusis, brunneo-nigricantibus, rubido-iridescentibus, demum pallidis; stipite brevi, nigro-nitente, ex hypothallo tenui brunneo-iridescente; columella abrupte ante peridii apicem evanida; capillitii floccis prope superficiem tenuiter reticulatis, prope apicem rarescentibus; gleba brunneo-nigricante; sporis opace brunneis, levibus, sub microscopio valde augente minutissime parce papillatis, 7,5 μ . diam.

Hab. ad ligna emortua in America boreali.

3. **Stemonites carolinensis** Mac Bride, Slime Moulds, p. 122, t. XIII, 6031
 fig. 5 et XVIII, fig. 1. — Peridiis hinc inde cæspitulosis, minutis, cylindraceis, sursum tenuatis, ferrugineis dein cinereis v. purpurascentibus, stipite nigro-nitente, quartam fungilli partem attingente, levi præditis, hypothallo nigro-brunneo manifesto; columella nigra sensim tenuata, denique apicem versus evanescente; capillitio denso, interiore ex ramulis pallidis, laxè anastomaticis formato, exteriori minute reticulato, areolis 3-15 μ . diam.; sporis globosis, levibus, 6-7 μ . diam., pallide violaceo-brunneis, coacervatis ferrugineis.

Hab. ad fragmenta vegetabilia, South Carolina et Ohio Amer.

bor. (MORGAN). — Teste cl. Torrend, Les Myx. p. 239, forte eadem ac *Comatr. Persoonii* v. *pulchella*, sed teste Lister Myceto. II ed. p. 149 non differt a *Stem. pallida* Wing.

4. **Stemonites flavo-genita** Jahn, in Abhandl. Bot. Ver. Brandb. XIV 6032 (1904) p. 165, Torrend, Myxom. p. 144, *St. ferruginea* Fr., non Ehr. — Plasmodio flavo; peridiis 5-8 mm. alt., ferrugineo-cinnamomeis, cylindricis, utrinque obtusis; stipite nigro brevissimo, 0,5-1,5 mm., columella apicem peridii sæpius attingente et tunc dilatato-infundibuliformi; capillitii floccis brunneis v. ferrugineis, nodulis, imprimis introrsum præditis; areolis superficiem versus 6-16 μ . diam.; sporis ferrugineo-pallidis, leniter verrucosis v. sublevibus, 8-9 μ . diam.

Hab. ad ligna putrida in Britannia, Germania, Austria, et in America boreali.

5. **Stemonites ferruginea** Ehr., non Fries. — Ita vocanda *Stemonites* 6033 *Smithii* Mac Bride — Syll. XI, p. 466. — A præcedente differt plasmodio albo, peridio stipiteque longioribus, sporis minoribus, 4-6 μ . diam. — Vulgata in Europa, Asia, Amer. et Oceania.
6. **Stemonites virginienis** Rex, Proc. Philad. Acad. (1891) p. 391, 6034 Torr. Myx. p. 141. — A *Stem. fusca*, cui valde affinis, distinguitur teste Torrend peridiis brunneis v. rufis, ex ovali elongatis, capillitii areolis minutis, 5-7 μ . latis, sporisque 5-7 μ . diam., laxe reticulatis, areolis tantum 10-12 μ . diam.

Hab. in lignis emortuis in America boreali. — Teste List. Myceto. II ed. p. 158 est *Comatricha typhina* var. *heterospora* Rex.

COMATRICHA Preuss — Syll. VII p. 394, X p. 87, XI p. 466, XIV p. 837, XVIII p. 211.

1. **Comatricha lurida** Lister, Myceto. (1894) p. 119, t. 15, f. Ba-c, Torr. 6035 Myx. p. 135. — *Comatrichæ obtusæ* forma globulosa et minutie affinis; differt columella peridii medietatem non superante et sursum in ramulos primarios copiosos et validos usque ad apicem peridii partita, extremitatibus liberis vix curvis; sporis verrucosis.

Hab. ad folia emortua in Britannia.

2. **Comatricha rubens** Lister, Myceto. (1894) p. 123, t. 45, f. B d-f 6036 Torr. Myx. p. 138. — Plasmodio albo-hyalino; peridiis totis 1-2 mm. alt., obovato-ellipsoideis vel subglobosis, rectis vel inclinatiss, sparsis, 0,3-0,5 mm. lat., brunneo-roseis, tunica sursum fugaci, inferius membranacea et persistente; stipite setaceo, nitide nigro, 0,5-1,5 mm. alt., ex hypothallo brunneo circulari enascente; co-

lumella ad $\frac{2}{3}$ peridii attingente, apice ramosa; capillitii floccis violaceo-brunneis, primariis crassioribus, sursum sensim tenuissimeque angustatis liberisque, floccis inferioribus tunicæ adhærentibus, ibique dilatatis; sporis globosis, echinulatis, 7-8 μ . diam., palide lilacino-brunneolis.

Hab. ad folia emortua in Britannia et Amer. bor.

3. *Comatricha typhina* (Roth) Rost. — Syll. VII, p. 394 — var. β 6037 *heterospora* Rex, Amer. Slime-Moulds p. 131, Torr. Myx. p. 136. — Peridio fugaci; sporis tenuiter reticulatis nec non prominenter verrucosis. — var. γ *microspora* List. Mycetoz. pag. 121, Torr. Myx. p. 136. — Peridio fugaci; sporis minoribus, 3,5-4,5 μ . d., tenuiter reticulatis nec non prominenter verrucosis.

Hab. β in lignis putridis in Austria et Amer. bor. γ in foliis dejectis in Britannia.

4. *Comatricha irregularis* Rex, Proc. Philad. Acad. (1891) pag. 393, 6038 Torr. Myx. p. 139. — Peridiis congesto-cæspitosis, atro-brunneis v. nigricantibus, semi-erectis v. nutantibus, 4-5 mm. altis, irregulariter cylindricis, variabilibus, stipitatis; stipite nigro distincto peridium subæquante; hypothallo brunneo, nitido; columella centrali, tenui, flexuosa, apicem attingente; capillitio laxo, aperto, floccis arcuatim radiantibus, irregulariter reticulato-connexis, brunneis, extrorsum subhyalinis, areolis latis; gleba nigra; sporis læte brunneis, minute verrucosis, 7-8 μ . diam.

Hab. ad ligna et cortices, New England, Kansas, Texas Amer. bor. — Ab affini *C. longa* statura minore, capillitio magis evoluto apicibus liberis brevioribus et subhyalinis.

LAMPRODERMA Rost. — Syll. VII p. 390, XI p. 465, XIV p. 838.

1. *Lamproderma Lycopodii* (Nees) Raunk., in Bot. Tidsskr. XVII, 6039 pag. 90 (1888), *Cribraria Lycopodii* F. Nees in Fr. S. Myc. III, p. 163, *Stemonites cribrarioides* Fr., l. c. — Syll. VII, p. 399. — Plasmodio?; peridiis sparsis, globulosis, sessilibus, hypothallo violaceo-brunneo insertis, concoloribus, basi persistentibus et limbum laciniatum formantibus; columella cylindrica, peridii medium attingentibus; capillitio e columellæ apice oriundo, violaceo-brunneo, externe sensim ramosiore et dilutiore; sporis brunneo-violaceis, tenuiter reticulatis, 12-18 μ . diam.

Hab. in foliis *Lycopodii* sp. in Thuringia et Lyc. annotini, Sjælland Daniæ (RAUNKIAER).

2. *Lamproderma atrosporum* Meylan in Bull. Soc. Vaudoise de S. N., 6040

XLVI (1910) p. 51. — Plasmodio ætate provecta nigro; peridiis sessilibus v. pedicellatis, 1-3 mm. alt., 1-1,2 mm. diam., globulosis v. oblongis, opace nigris v. parce iridescentibus, tunica fugaci, non membranacea, in areolas minutas disrumpente, rarius membranacea et ad basim relaxata; capillitio nigro v. saturate atro-brunneo, numquam violaceo sed forma et divisione ut in *L. violaceo* v. *Caresticæ*; columella tenui medietatem superante; sporis nigris fortiter spinoso-papillatis v. ob papillas seriatas reticulatis.

Hab. ad fragmenta vegetabilia ad nives alt. 1100-1500 m. in alpibus Jura Helvetiæ.

LINDBLADIA Fr. — Syll. VII p. 408.

1. *Lindbladia effusa* (Ehrb.) Rost. — Syll. VII, p. 408 — var. *simplex* 6011
Rex, Bot. Gaz. XVII, p. 201 (1892) Torr. Myx. p. 81, t. I, f. I, t. II, f. 1. — Peridiis contiguis sessilibus, interdum liberis et breviter stipitatis, stipite brunneo-nigricanti, ruguloso; granulis plasmodiis quandoque superficialibus et seriatis ut in *Cribrariæ* specie quadam.

Hab. ad ligna emortua, imprimis Coniferarum in Amer. bor. et Japonia.

CRIBRARIA Schrad. — Syll. VII p. 412, X p. 90, XI p. 467.

1. *Cribraria rubiginosa* Fr. — Syll. VII pag. 417 — var. *longipes* 6042
Meylan, Bull. Soc. Vaud. Sc. nat. XLIV (1908) p. 294. — Pedicello usque ad 2 v. 3 mm. alto, plasmodio intense purpureo, in peridia tarde mutato.

Hab. in fragmentis vegetabilibus, Côte aux Fées et Chasseron in Jura Helvetiæ.

2. *Cribraria Bieniaszii* (Racib.) Torr. Myxom. p. 74, *Heterodictyon* 6043
Bieniaszii Racib., Hedw. (1889) pag. 121. — A *Cribraria macrocarpa* dignoscitur stipite longiori, 1,5-2,5 mm. alt., calyculi dentibus robustioribus et longioribus conniventibus (ut in *Dictydio*) sporis vivide flavis, levibus 5-7 μ . diam.

Hab. in truncis putrescentibus, Tenczynek Galiciæ occid. (F. BIENIASZ). — Teste List., Mycetoz. II ed. p. 178, hæc species et *Cribr. tatrica* Racib. non satis differunt a *Cribr. macrocarpa*.

3. *Cribraria piriformis* Schrad. — Syll. VII, p. 415. — var. β *maxima* 6044
Torrend, Myxom. p. 77. — Peridiis majoribus, 0,7-1 mm. diam.; nodis variabilibus nunc minutis trigonis ut in *Cribraria tenella*,

nunc majoribus stellatis ut in *Cr. intricata*, stipite robusto. — Var. γ *notabilis* Rex ap. Torrend, Myxom. p. 77. — Peridiis minutis, globulosis 0,3-0,5 mm. diam.; nodis convexis prominentibus, parvis subrotundis v. irregularibus; stipite brevissimo.

Hab. in truncis præsertim Coniferarum, β in Lusitania, γ in America boreali.

4. *Cribraria languescens* Rex, Proc. Philad. Acad. (1891) pag. 394, 6045

Torr. Myx. p. 79. — Plasmodio?; peridiis stipitatis saturate rubris basi violaceo-tinctis, minutissimis, 0,2-0,3 mm. diam., globulosis, nutantibus, solitariis; stipite exili et elato, 2-3 mm., subulato, flexuoso, brunneo-rubido; calyculo concolore nitido, denticulato, granulis perexiguus radiantibus, 0,3-1 μ . diam., consperso, reticuli areolis triangularibus, nodulis polygoniis munitis, filamentis paucis liberis auctis; gleba saturate rubra, dein expallente; sporis subincoloribus, levibus, 5-6,5 μ . diam.

Hab. ad truncos putres in America boreali.

5. *Cribraria violacea* Rex, Proc. Philad. Acad. (1891) p. 393, Torr. 6046

Myxom. p. 80. — Plasmodio violaceo-nigricanti; peridiis totis 0,5-1 mm. alt., globulosis v. ellipsoideis, minutissimis, vix 0,2 mm. lat., saturate violaceis, metallico-nitentibus, rectis vel nutantibus, stipite 0,3-0,5 mm. alt., violaceo-nigricante, subulato; calyculo crateriformi, membranaceo, cyaneo-violaceo, leviter dentato, minutissime plasmodico-granuloso; reticulo rudimentali, areolis latis et irregularibus nodisque trigonis dilatatis prædito; gleba pallide violacea; sporis rubescentibus, subverrucosis, 7-8 μ . diam.

Hab. in truncis vetustis Abietis, Tiliæ etc. in Amer. bor. et Britannia. — Peridii tunica interdum persistens et apice tantum per poros 3-4 dehiscens.

6. *Cribraria colossea* Spegazz., An. Mus. Nac. Buenos Aires t. XIX 6047

(1909) pag. 258. — Hypotallo latissime effuso, 10-50 mm. diam. plus minusve interrupto, matrice arcte adnato, sordide fusco pelliculo anhisto; stipitibus confertis, erectis, 4-5 mm. long., 60-65 μ . cr. in vivo teretibus, in sicco longitudinaliter rugulosis sæpeque leniter tortis, opacis, basi subnodulosis atque magis infuscatis, sursum lenissime attenuatis apiceque abrupte in peridium expansis; peridiis globulosis, non umbilicatis, 400-500 μ . diam., albidis, cortice squarruloso mox frustulatim evanescente, calice destituto tectis; capillitio ex apice stipitis leniter constricto abrupte exurgente, floccis a basi liberis v. brevissime connatis, subdichotomicè anastomosantibus, nodis eximie triangularibus dilatatis infuscatisque;

sporis pallide ferrugineis 5-7 μ . diam, tenuiter tunicatis, laxe minuteque papillosis.

Hab. ad caudices putrescentes cariosos in silvis prope Formosa, Chaco Argentinae. — Species eximia *Cr. argillaceæ* peraffinis sed certe distincta.

RETICULARIA Bull. — Syll. VII p. 418, XI p. 468, XIV p. 838.

1. *Reticularia jurana* Meylan, Bull. Soc. Vaud. S. N. XLIV (1908) 6048 p. 297. — Plasmodio albo v. albo-cinereo, intra 4-5 dies in peridium mutato, vix 1 cm. lat., 3-5 mm. cr., tunica brunneola parum nitente, fragilissima, et maturitate facillime secedente, intus cuprea nitida; pseudocapillitio satis vario, nunc floccis tenuibus hinc inde dilatato-membranaceis, nunc parietibus pertusis (ut *Enteridii*) formato; sporis globosis, 5-6 raro 7 μ . diam., tenuissime reticulatis, vix papillosis, pallide brunneis.

Hab. ad fragmenta vegetabilia, Granges de S.te-Croix alt. 1200 m. et Chasseron m. 1300-1500 in Jura Helvetiae. — Sporibus et pallidius coloratis a *R. Lycoperdo* videtur differre, sed cl. Lister, Myceto. II ed., ut hujus speciei meram formam e loco aperto censet.

2. *Reticularia lobata* List., Myceto. pag. 161, t. LIX B, *Liceopsis lobata* (List.) Torr. Myx. p. 121, t. IX, f. 15-16. — Plasmodio albo-hyalino; peridiis globosis 0,3-0,8 mm. diam., solitariis v. irregulariter aggregatis, brunneo-ferrugineis v. nigricantibus, nitidis, sessilibus v. vix stipitatis, tunica tenuiter supra fugaci et glebam ferrugineam pulveraceam ostendente; capillitii floccis raris, hyalinis, 2-4 μ . cr., simplicibus v. anastomoticeis, axillis dilatatis; sporis dilute ferrugineis, minute saltem pro parte, reticulatis, 6-10 μ . diam.

Hab. ad caudices vetustos in Britannia, Gallia, Lusitania. — Sec. auctorem *Enteridio Rozeano* valde affinis.

LYCOGALA Mich. — Syll. VII p. 435, XI p. 470, XIV p. 840, XVI p. 824.

1. ? *Lycogala Torrendii* Bres. in Torr. Myxom. p. 88, t. IX, f. 19-20. — Plasmodio?; peridiis? solitariis v. gregariis, superficialibus e griseo brunneis, subglobosis v. subconicis, 4-6 mm. diam. vel 5-6 mm. alt. et 3-4 mm. lat., interdum ad basim sulcatis et in pseudostipitem tenuatis, leviter pruinosis v. subfloccosis e cute tenuiter dilacerata; gleba dilute rosea; capillitio raro e filamentis

valde tenuibus, paulatim tenuatis, 2 μ . cr., sursum 1 μ . cr., hyalinis, tubulosis, 100-120 μ . long.; sporis ellipsoideis, incoloribus, granulosis 6-7 \times 3.

Hab. ad terram in cistetis arenosis, S. Fiel et Valle de Rosal Lusitaniæ. — Dubia stirps et vix myxomycetæ; an potius *Ceratomyce* e. g. *Cer. pusillo* affinis?

2. ? *Lycogala terrestre* Fr., Syst. mycol. III, p. 83, Corda Icones 6051 VI, p. 15, t. II, f. 37, Micheli N. Pl. gen. p. 216, t. 95, f. II, 5. — Cæspitosum, obovatum, supra obtusatum, leve dein furfuraceum, primo cinnabarinum, dein virescenti-fuscum v. olivaceo-rufum; gleba carnea, dein obscure carnea; capillitio ramoso plicatoverrucoso, hinc inde intumescenti, albo; sporis subglobosis ex hyalino flavidis, 7-7,5 μ . diam.

Hab. ad terram lutosam foliis dejectis obtectam in Bohemia et Italia. — Certe nil est nisi var. obovata subterrestris *Lycogalactis epidendri*.

TRICHIA Hall. — Syll. VII p. 438, X p. 93, XI p. 470, XIV p. 839, XVIII p. 212.

1. *Trichia contorta* (Ditm.) Rost. — Syll. VII, p. 444 — var. β in 6052 *conspicua* Torr., Myx. p. 115. — Peridiis minutissimis; elateriis levibus, regulariter cylindricis, sæpius sursum inflatis apiceque in acumen breve terminatis; sporis distinctis regularibus. — Var. γ *iowensis* Macbr. Amer. Slime-Moulds p. 211 (ut spec.) t. III, f. 3, t. X, f. 5, Torrend, Myx. pag. 115, t. IV, f. 37. — Elateriis 3 μ . cr. spinulis curvis, sæpe 2-3-fidis, 3-6 μ . longis conspersis; sporis 9-11 μ . diam.

Hab. ad ligna et cortices putres, β in Europa et Amer. bor., γ in Amer. bor.

2. *Trichia lutescens* List., Journ. of Bot. XXXII (1897) pag. 216, 6053 Torr., Myxom. pag. 116, *Tr. contorta* γ *lutescens* Lister, Mycetoz. p. 169. — Ab affini *T. contorta* dignoscitur peridiis plerumque globosis, vivide vitellinis, 0,2-0,7 mm. diam., tunica granulis calceis experte et elateriis semper levibus, magis regularibus, brevissimis et furcatis.

Hab. ad ligna emortua in Britannia, Norvegia, Lusitania.

3. *Trichia pulchella* Rex, Proc. Acad. Philad. 1893, p. 366, Torr., 6054 Myxom. pag. 113. — A persimili *Trichia affini* distingui videtur peridiis magis sparsis, elateribus angustioribus, vix 3-4 μ . cr., sporis

paullo minoribus, 12 μ . diam., reticuli areolis paucis 3-4 in quoque hemisphærio, costulis punctatis.

Hab. in lignis emortuis in America boreali.

4. *Trichia Stuhlmanii* Eichelb., Verh. Naturw. Ver. Hamburg, 3 Flge. 6055 XIV (1906) p. 32. — Plasmodio hemisphærico rubente, 470? μ . d.; stipite primum albo, subdiaphano, dein chalybeo rigidulo, 200 \times 34, apice capitulum globosum aurantio-rubrum, 196 μ . diam. gerente; capillitii floccis e spiriculis 3-4 densissime convolutis formati, 4 μ . diam.; sporis globosis, flavis, 8,5 μ . diam., tunica fortiter spinulosa.

Hab. in lignis vetustis, Amani Usambara Afric. orient. — Capitulum demum valde ampliatum, usque ad 430 μ . diam. et saturate rubro-brunneum æque ac stipes qui valde breviatur (vix 64 μ . long.). Habitus fungilli junioris fere stilbeus. — Teste Lister, Mycetoz. ed. II, p. 216, non satis differt a *Trichia fallace*.

HEMITRICHIA Rost. (1873), *Hemiarcyria* Rost. (1875) — Syll. VII p. 446, X p. 98, XI p. 471, XIV p. 839, XVIII p. 212.

1. *Hemitrichia Karstenii* (Rost.) Lister, Mycetoz. I ed. p. 228, *Hemiarcyria Karstenii* Rost. — Syll. VII, p. 448 — var. *lutescens* Torr., Myx. pag. 106. — Peridiis v. plasmodiocarpis flavo-aureis, granulis calcareis carentibus.

Hab. in cortice Eucalypti, Quercus etc. in Lusitania.

2. *Hemitrichia helvetica* Meylan, in Bull. Soc. Vand. de S. N. XLVI 6057 (1910) p. 54. — Plasmodio?; peridiis sessilibus, globulosis, aggregatis, flavo-aurantiacis, 0,5-1 mm. diam.; tunica peridii nitida, irregulariter disrumpente, non papillosa nec reticulata; gleba flavo-aurantia v. rubido-ochracea, quam *T. affinis* saturatiore; elateriis 4-5 μ . cr.; extremitatibus plerumque liberis; spiris 4-5 regularibus, confertis, non spinosis; sporis globosis, reticulatis, 11-15 μ . diam., quoque hemisphærio marginulo 0,5-1 μ . cr. ornatis et 2-4 areolas præbentibus.

Hab. ad Muscos in trunco fagineo putri, Chasseron, alt. 1300 m., Jura Helvetia.

3. *Hemitrichia minor* G. List., Journ. of Bot. XLIX (1911) p. 62, 6058 Mycetoz. II ed. p. 225, t. 187. — Plasmodio?; peridiis stipitatis v. sessilibus, sparsis v. per paria approximatis, subglobosis, 0,2-0,4 mm. diam., nitidulis, pallide flavo-fulvis; tunica membranacea, pallide flava, minute papillosa v. plicis tenuissimis curvis signata et grumulosa; stipite cylindræo, nigro, 0,1-0,2 mm. alt. intus a-

tro-grumuloso; capillitii floccis laxè reticulatis, flaccidis, flavidis, 3-4 μ . cr., apicibus liberis paucis v. numerosis, spiriculis 3-4 exiguis, modo levibus, modo spinulis crebris 1-4 μ . longis donatis sæpeque vesiculoso-dilatatis; sporis pallide flavis, minute denseque verruculosus, 9-10 μ . diam.

Hab. ad cortices emortuos inter Hepaticas, Tanabe Kii Japoniæ (K. MINAKATA).

4. *Hemitrichia lejotricha* Lister, Myceto. II ed. pag. 224, tab. 172, 6059
Hem. intorta var. *lejotricha* List., Myceto. I ed. p. 176. — Plasmidio aquose albo; peridiis stipitatis, raro sessilibus, sparsis, subglobosis, 0,5-0,9 mm. diam., nitidulis, flavidis v. olivaceis, tunica pro more duplici, externa grumulis atro-brunneis referta, interiore diaphana, crescentiis sparsis anulatis v. semilunaribus prædita; capillitii floccis intricato-contortis, parce ramosis, levibus, flavidis, apicibus liberis acuminatis v. obtusis, spiriculis 3-6 donatis; sporis flavis v. olivaceis, minute verrucosis, 9-13 μ . diam.

Hab. in foliis ramisque dejectis in Britannia, Suecia, Germania, Ceylon.

ARCYRIA Hill. — Syll. VII p. 425, X p. 92, XI p. 469, XIV p. 839, XVIII p. 212.

1. *Arcyria ferruginea* Saut. — Syll. VII, p. 431 — var. β *helvetica* 6060
 Torr., Myx. p. 98, t. III, f. 14. — A typo differt floccis interdum 3 μ . cr., remote dilatato-nodosis, nodis 1 μ . diam., globulosis vel ovoideis, spinulis vel reticulo præditis; sporis 10-12 μ . diam. — Var. γ *cornuvioides* Rac., Hedw. XXVIII (1889) pag. 123, Torr., Myx. pag. 98. — Gleba brunneo-cinnamomea (non rubescente v. ochracea); capillitio ut in typo; sporis minoribus 6,5-8,5, levibus. — Var. δ *Gabriellæ* Grove, Fauna of Midl. Platau: Mycetoza p. 20 in Birmingh. Nat. Hist. and Philosoph. Soc. (1910). — Capillitio speciei sed floccis partis inferioris pallidioribus et tenuioribus, sensim versus partem superiorem crassioribus et saturatoribus spinisque brevibus dense conspersis; peridii interiori parte reticuli areolis rotundis densis prædita, exteriori tenuiter papillosa; sporis tenuiter verrucosis. — Ab affini *Heterotrichia Gabriellæ* recedere videtur colore atro-rubro, nec flavido-brunneo et floccorum liberorum parcite.

Hab. ad truncos, caudices emortuos, var. β in Helvetia, γ in Polonia, δ in Britannia.

2. *Arcyria adnata* (Batsch) Rost. — Syll. VII, p. 428. — var. *hel-* 6061

vetica Meylan, in Bull. Soc. Vaud. S. N. XLVI (1910) p. 55 (4. *incarnata*). — Peridiis globulosis purpureis iridescentibus, pedicello 1 mm. alto præditis, tunica persistenti integra.

Hab. ad Muscos in trunco vetusto fagineo, Chasseron, alt. 1300, Jura Helvetiæ.

3. **Arcyria anulifera** Torr., Myx. pag. 102, Lister, Mycetoz. II ed. 6062 p. 239, t. 185. — Plasmodio?; peridiis sparsis, stipitatis, subglobosis v. ovoideis 0,5-0,6 mm. diam., flavo-fulvellis; tunica membranacea, papillosa, fulva, diu persistente, crassiuscula, ambitu irregulari, deorsum plicata; stipite fulvo, 0,2-0,4 mm. alto, cellulis sporomorphis (?) referto; capillitii floccis reticulatis, flaccidis, flavidis, 1-1,5 μ . cr., hinc inde anulis crebris prominulis, 1 μ . cr. ornatis; floccis basalibus 2 μ . cr., paullo crassius anulatis, submoniliformibus; sporis pallide flavis, sublevibus v. parcissime verruculosus, 6-7 μ . diam.

Hab. in foliis Pini Pinastri, Pinhal d'El-Rei, Lusitania. — Teste cl. Torrend ad *Lachnobolium* nutat.

4. **Arcyria glauca** Lister ap. Minakata in Bot. Mag. Tokyo XXII 6063 (1908) p. 322 et Mycetoz. II ed. p. 241, t. 182. — Plasmodio?; peridiis stipitatis, in cæspitulos 4-20 congestis, ovoideis v. cylindraceis 0,4-2,5 mm. alt., 0,4-0,8 mm. lat. pallide glaucis; tunica membranacea, infundibuliformi, subnutante, minute reticulata; stipite pallide viridi v. griseo-brunneo, curvulo, subflaccido, 0,2-0,3 mm. alt., cellulis sporomorphis (?) referto; capillitii floccis reticulatis elasticis, 0,5-3 μ . cr., calyculo adfixis, apicibus liberis paucis spiriculis laxis prominulis, modo levibus, modo spinulosis; sporis pallide glaucis, sublevibus, 7 μ . diam.

Hab. ad ligna emortua præsertim Machili Thunbergii, Kii Japoniæ (MINAKATA).

5. **Arcyria stipata** (Schw.) Lister Mycetoz. II ed. p. 243, *Hemiarcyria stipata* (Schw.) Rost., Monogr. App. p. 41, 42, *Leangium stipatum* Schw., Syn. N. Am. Fungi p. 258 (1834), *Hemitrichia stipata* (Schw.) Macbr., Am. Slime-Moulds, p. 204, t. I, f. 8, Torr. Myxom. p. 107, t. III, f. 24-26. — Plasmodio?; peridiis 1,5-2 mm. alt., aggregatis, cylindraceis v. irregularibus, vivide rubido-cupreis vel brunneis, carmineo-inspersis; stipite concolore, cellulis sporomorphis farcto, ex hypothallo membranaceo oriundo; tunica tantum basi persistente, calyculiformi; capillitio concolore ramosissimo reticulum elasticum laxum formante, floccis extremitate liberis et bulbosis, spiralibus parum distinctis, spinulis verrucisque consper-

sis; gleba rubescente; sporis pallide rubellis, 6-8 μ . diam., sublevibus.

Hab. ad ligna emortua in Amer. bor., Anglia, Ceylon. — Ad genus *Hemiarcyriam* nutat.

6. *Arcyria magna* Rex, Proc. Acad. Philad. (1893) pag. 364, Torr., 6065
Myxom. p. 97, — Ab *Arcyria nutante* differt colore cinereo vel cinereo-fulvo (roseo in var.); calyculo non reticulato, nec papilloso; stipite longiore, usque ad 1 mm., rubello; floccis evidentius spinulosis.

Hab. ad ligna emortua in Amer. bor. — Var. *rosea* Rex, l. c.
— Peridio roseo. Cum typo

7. *Arcyria occidentalis* (Macbride) Lister, Mycetoz. II ed. pag. 245, 6066
t. 192, *Lachnobolus occidentalis* Macbride, Slime-Moulds p. 188, t. II, f. 2 et 4 (1899) Torr., Myxom. p. 95, t. III, f. 4-5. — Plasmodio?; peridiis globulosis v. cylindricis, 0,5-1 mm. diam., solitariis v. gregariis sed non aggregatis, breviter stipitatis, roseis v. incarnatis, dein brunneo-ochraceis, tunica tenuissima, diaphana, pruinosa, vertice fugaci, basi cupuliformiter persistente; capillitii floccis hinc constrictis, inde dilatatis, verrucosisque, tunicæ punctis pluribus adhaerentibus; gleba incarnata; sporis incoloribus, levibus, 7,5-9 μ . diam.

Hab. ad ligna emortua in America boreali.

8. *Arcyria minor* Schw., Syn. Am. bor. p. 259 (1834) Morgan in Journ. 6067
Cincinnati. Soc. H. N. 16 (1893) p. 25, t. I, f. 17. — Peridio ovoideo-oblongo, e rubro brunneo, calyculo minuto sulcato-granuloso prædito; stipite brevi, 0,4-0,7 mm. alt., erecto, brunneo-rubro, capillitio demum elongato-cylindraceo, usque ad 1,5-3 mm.; floccis uniformiter 2,3-3 μ . cr., semi-anulis prominentibus serialiter spiralibus donatis; sporis globosis, levibus, 7-9 μ . diam.

Hab. ad ligna et Polyporos putrescentes in America boreali.
— Probabiliter var. *Arc. adnata*.

9. *Arcyria lilacina* Quél., Assoc. Franc. Advanc. Sc. XIII (1884) p. 8, 6068
t. VIII, fig. 16. — Peridiis cylindraceis, tenuibus, 1,5 mm. alt., valde fugacibus, griseo-lilacinis; stipite brevi, vix 0,5 mm., saturate violaceo nitido e thallo argenteo oriundo; capillitio e reticulo granuloso et plicato, griseo-lilacino conflato; sporis sphaericis, 6 μ . diam., tenuissime asperulis, opalinis.

Hab. caespitosa v. aggregata in lignis putridis, Gironde et Vosges Galliae (FORQUIGNON). — Affinis *Arcyriae cinereæ*.

PERICHÆNA Fr. — Syll. VII p. 420, X p. 91, XI p. 468, XIV p. 839, XVIII p. 213.

1. **Perichæna depressa** Lib. — Syll. VII, p. 420. — var. **quadrata** 6069 (Macbr.) Torr., Myx. p. 92, *Per. quadrata* Macbr., Amer. Slime-Moulds p. 184. — Peridiis rubidis v. brunneis, quadrangularibus, exiguis, vix 0,5 mm. diam.; capillitio raro; sporis dilute flavis, 9-11 μ . diam.

Hab. ad truncos in Pennsylvania, Ohio, Illinois, Missouri A. mer. bor.

2. **Perichæna Krupii** Racib., Hedw. XXVIII, p. 124 (1889) Torr., 6070 Myxom. p. 94. — Plasmodio?; peridiis brunneo-avellaneis, sæpius vero plasmodiocarpis vermicularibus, 10-15 mm. long., modo anulatim dispositis, interdum globoso-depressis 0,5-1,5 mm. diam., solitariis; tunica simplici minute verrucosa operculo dehiscente, intus tumentis vesicularibus 2-12 \approx 1-3 conspersa; capillitio tunicæ magna ex parte adhærente, floccis tenuibus 0,5-1,5 μ . diam., copiosissimis, parce ramosis, levibus v. verrucosis v. minute denticulatis; sporis brunneo-flavidis, tenuiter verrucosis, 7-8,5 μ . diam.

Hab. ad cortices in Polonia. — Species ulterius inquirenda.

3. **Perichæna pulcherrima** Petch, Ann. R. Bot. Gard. Peradeniya 6071 IV, Pt. V (1909) p. 305. — Peridiis sphericis, 0,3 mm. diam. v. oblongis 0,7 mm. long., 0,3 mm. cr., sessilibus in hypothallo irregulari nitente insertis v. sparsis, breviter stipitatis, capitulo globoso 4 mm. diam.; stipitibus interdum connatis et peridia 2 vel 3 ferentibus; membrana nitida purpurea v. rubro-brunnea, duplici, exteriori purpurea granulosa, interiori tenui hyalina sæpe hexagono-reticulata; stipite 0,3 mm. long. 0,1 mm. diam., striato, brunneo v. rubro-brunneo, intus granuloso; capillitio ex floccis ramosis pallide brunneis irregularibus 4 μ . diam. hinc inde inflatis formato et verrucis minutis spinulisque obtusis consperso; sporis globosis 15-17 μ . diam., brunneolis crebre, spinulosis.

Hab. in ramis emortuis Theobromæ Cacao et Erythrinæ lithospermæ, Ukuwela, Ceylon.

CORNUVIA Rost. — Syll. VII p. 423, X p. 92.

1. **Cornuvia metallica** (B. et Br.) Rost. — Syll. VII, pag. 423 — 6072 var. **intermedia** Meylan, in Bull. Soc. Vaud. S. N. XLVI (1910) p. 56 (*Margarita*). — Plasmodio primitus albo dein flavo v. roseo demum brunneo; plasmodiocarpis sinuosis 2-15 mm. longis, 0,5-1,5 mm. lat., cupreis, tarde maturescentibus; capillitio bene evo-

luto, modo granuloso, modo levigato et hinc inde anulato-incrasato; sporis granulosis.

Hab. ad caudices vetustos udos, alt. 1000-1300 m., Jura Helvetiæ.

DIANEMA Rex, Proc. Acad. Philad. (1891) p. 397 (Etym. *dia* trans, per et *nema* filum, floccus). — Peridia sessilia v. plasmodiocarpa; tunica membranacea v. cartilaginea. Capillitium ex foccis fere rectis, tenuibus, peridii parti superiori et inferiori affixis formatum.

1. **Dianema Harveyi** Rex, Proc. Philad. Acad. (1891) p. 379, Torr., 6073
Myx. p. 84. — Plasmodio?; peridiis subrotundis v. convexis, 1 mm. diam. v. plasmodiocarpis in ferrum equinum curvatis, sordide rubris v. æneis, tunica membranacea diaphana irregulariter dehiscente; capillitii floccis simplicibus v. apice furcatis, ochraceis, 1,5-2 μ . cr.; gleba ochracea v. lateritia; sporis pallide flavis, e sublevi subechinulatis, liberis, 8-10 μ . diam.

Hab. in lignis emortuis in America bor. et Britannia.

2. **Dianema corticatum** Lister, Myceto. p. 205, t. 77 B, (1894) Torr. 6074
Myx. p. 84, t. II, f. 13-15. — Plasmodio roseo; peridiis hemisphaericis, 1 mm. diam. v. plasmodiocarpis elongatis v. subreticulatis, 2-12 mm., castaneo-brunneis; tunica duplici, exteriore cartilaginea, olivacea v. ochracea, granulifera, interiore contigua hyalina; capillitii floccis brunneis v. pallidis, nodulosus v. interdum spiriculas 1-3 præbentibus; gleba brunneo-rubida; sporis subincoloribus, uno latere verrucosis, subellipsoideis, 10-12 \times 8-9, in glomerulos 4-6 junctis.

Hab. in lignis putridis in Britannia, Scandinavia, Helvetia.

LAMPRODERMOPSIS C. Meylan, in Bull. Soc. Vaud. S. N., XLVI (1910) p. 56 (Etym. *Lamproderma* et *opsis* aspectus). — Peridia sessilia v. pedicellata, globulosa; tunica peridii nitore metallico prædita, membranacea, persistente; columella nulla. Capillitium ex inferiore peridii parte oriens, floccis ut in *Lamprodermate*. — Absentia columellæ et capillitii originis situ ab hoc genere distinguitur, sed, teste Lister, cum gen. *Dianema* potius congruit.

1. **Lamprodermopsis nivalis** Meylan, l. c. p. 56-57, *Dianema nivale* 6075
List., Myceto. II ed. pag. 258. — Plasmodio?; peridiis discretis, sessilibus v. pedicellatis, 1-1,5 mm. diam., globulosus, fulvis, metallicis, stipite concolore usque ad 1 mm. alt., tunica peridii membranacea, levi, basi diu persistente; columella nulla; capillitii floccis

iterato-ramosis, ramis ultimis anastomaticis, permanentibus et spongillæ faciem præbentibus, levibus, subinde undulatis; sporis pallide fulvis, subdiaphanis, minutissime papillois, 10-12 μ . diam.

Hab. in culmis vetustis Graminearum prope et sub nive pr. Ste-Croix, alt. 1200-1280, Jura Helvetiæ.

LISTERELLA Jahn, Ber. d. Deutsch. Bot. Ges. XXV (1906) p. 540 (Etym. a cll. ARTHURO et GULIELMA LISTER filia, Myxomycetum eximiis monographis). — Peridia in lobos dehiscentia, tunica membranacea, calcifera. Capillitii flocci moniliformiter incrassati. Sporæ pallide umbrinæ.

1. *Listerella paradoxa* Jahn, l. c. p. 540. — Peridiis hemisphæricis, 6076 minutissimis 0,2-0,3 mm. diam., nigris, tunica copiose granuloso-calcifera; capillitii floccis tenuissimis, tunicæ parieti interiori adfixis, incrassato-moniliformibus; sporis pallide argillaceo-umbrinis, fere levibus, 7-8 μ . diam.

Hab. in thallo Cladoniæ rangiferinæ in Germania.

Fam. 2. Plasmodiophoraceæ ZOPF. ()*

TETRAMYXA Göbel — Syll. VII p. 465.

1. *Tetramyxa Triglochinis* Molliard, Bull. Soc. bot. Fr., LVI (1909) 6077 p. 23. — Axem inflorescentiæ in formam fusoidem tumefaciens, tumoribus 2,5 mm. cr., 1-1,5 cm. long, flores quoque deformans; sporis intracellularibus e plasmodio ortis, initio in formam tetradicam junctis, 4,5 \approx 3, maturitate secedentibus.

Hab. in axe inflorescentiæ Triglochinis palustris in pratis Saint-Nectaire, Puy-de-Dôme Galliæ. — A *Tetr. parasitica* imprimis differt sporis maturitate secedentibus.

LIGNIERA Maire et Tison, in C. R. Acad. Sc. Paris, (1911) 23 Janv. p. 1 (extr.) (Etym. a cl. prof. O. LIGNIER gallico). — In cellulis

(*) De Plasmodiophoraceis et generibus affinis v. excludendis efr. doctam revisionem criticam cll. R. MAIRE et ADR. TISON, *La cytologie des Plasmodiophoracées et la classe de Phytomyxinæ*, in Ann. mycol. VII (1909), p. 226-253, cum iconibus.

hospitis immutatis parasitans, nec tumores gignens; schizogonia reducta; sporæ in acervulos valsiformes conjunctæ.

1. *Ligniera radicalis* Maire et Tison, l. c. — Sporis levibus, 4-5 μ . 6078 diam., in acervulos rarius cavos conjunctis.

Hab. in radicibus *Callitriches stagnalis* in Gallia.

2. *Ligniera Junci* (Schwartz) Maire et Tison, l. c., *Sorosphaera Junci* 6079 Schwartz, in *Annals of Bot.* XXIV (1910) pag. 236 et 511. — Sporis levibus 5-7 μ . diam. in acervulos sæpius cavos conjunctis.

Hab. in radicibus *Junci bufonii*, obtusiflori, lamprocarpi in Britannia.

3. *Ligniera verrucosa* Maire et Tison, l. c. — Sporis crasse verrucosis, 4-5 μ . diam. in acervulos planos conjunctis.

Hab. in radicibus *Veronicae arvensis* in Gallia.

SPOROMYXA Léger, C. R. Ac. d. Sc. Paris CXLV (1907) pag. 837 (Etym. *spora* et *myxa* mucus). — Genus endoparasiticum in insectis. Status vegetativus: corpuscula ovoidea vel sphaerica 1-nucleata, 8 μ . longa; status reproductivus: myxoamœbæ 2-8 nucleatæ sphaericæ, majusculæ. Sporæ ex his amœbis schizogoniâ binaria v. plastotomiâ nascentes, ovoideæ, 10 \approx 8, tunica jodi et acidi sulphurici ope cyanescente præditæ, plerumque 1-nucleatæ. Sporangia nulla.

1. *Sporomyxa Scauri* Leger, l. c. p. 837. — Characteres generis. 6081

Hab. in organis genitalibus, adipe et sanguine Scauri tristis (Coleopteri) in Algeria. — Hucusque unica forma endozoica inter Myxomycetes. — Genus *Sphaeractinomyxon* Caullery et Mesnil (C. R. Soc. Biol. Paris LVI (1904) p. 408) a quibusdam ad Myxomycetes relatum, est potius Myxosporidiis (animalibus) adscribendum. *Sphaeract. Stolci* Caull. et Mesn. l. c. parasitatur in animalculis Tubificidis ad Cap de la Hague Gallia.

OPHRYOMYCES Léger et Hesse, C. R. Accad. Sc. Paris tom. 149 (1909) p. 303 (Etym. ex habitu in memoriam revocante schizogregarineam *Ophryocystis*). — Adsunt status vegetativus et sporæ confluyendo colonias cupuliformes plus minus elongatas formantes. Sporæ e fusione (*synkaryon*) duarum cellularum proximarum oriuntur. — Genus omnino dubium.

1. *Ophryomyces Dorci* Léger et Hesse, l. c. — Cellulis vegetativis 6082 globulosis 6-8 μ . diam., matricis epithelio rhizarum ope adherentibus, divisione se multiplicantibus et quasi plasmodia formantibus.

tibus; sporis maturis ovoideis, $12 \approx 9$, tunica levi, hyalina, resistente præditis, 1-nucleatis.

Hab. in canaliculis Malpighianis Dorci parallelepipedii (Coleopteri) in Gallia.

MYXOMONAS Brzezinski, in Bull. Inst. Ac. Sc. Cracovie (1906) p. 139 (Etym. *myxa* mucus et *Monas*).

1. **Myxomonas Betæ** Brzezinski, l. c. — Auctor describit stirpis suæ 6083
 cyclum extensum evolutionis: zoosporas, plasmodia, cystes, zoosporangia, sporas, sed ex inquisitionibus, ut videtur, diligentissimis a cl. Dr. J. Trzebinski editis in Zeitschrift f. Pflanzenkrank. XVII (1908) p. 321, demonstratur Myxomonadem non esse organismum proprium sed tantum formas varias elementorum cellularium e necrosi partium deformatum.

Hab. in radicibus aliisque partibus Betæ vulgaris var. Rapæ, cui morbos varios afferret in Rossia et verisimiliter in tota Europa; morbi vero qui aliis causis adscribendi sunt.

MYXOBACTERIACEÆ Thaxt. (*)

Syll. XI p. 460, XIV p. 842, XVIII p. 217.

CHONDROMYCES B. et C. — Syll. IV p. 576, XI p. 460, XIV p. 842, XVIII p. 217.

1. **Chondromyces crocatus** B. et C. — Syll. IV, p. 576, XI, p. 461. 6084
 — Acervuli 300-600 μ . alt.; cystophora simplicia v. parce ramosa, 15-60 μ . cr.; cystes versiformes, $30 \approx 10$ -15 in capitula pedicellata 80-100 μ . diam. junctæ; baculi 2-3 μ . long.

Hab. in fimo, fructibus putridis etc. in Amer. bor. et ins. Java.

2. **Chondromyces aurantiacus** (B. et C.) Thaxt. — Syll. XI, p. 460 6085
 — *Stigmatella aurantiaca* B. et C. — Syll. IV, p. 680. — Cy-

(*) Cfr. Synopsis generum et specierum a cl. ALFR. QUEHL exhibitam, titulo *Untersuchungen über die Myxobakterien* in Centralbl. für Bakter. II Abt. XVI (1906) p. 9-34, cum tab. col. et fig.

stophora pro more simplicia, 200-400 μ . longa; cystes e globoso ovoideæ in cystophoro sessiles, 25-50 μ . diam.; baculi 2-3 \approx 0,6.

Hab. in Lichenibus et Fungis putridis, fimo, lignis udis etc. in Amer. bor., ins. Java, Austria.

3. **Chondromyces lichenicola** Thaxt. — Syll. XI, p. 461 (nomen). — 6086

Læte ruber in brunneolum transiens, cystibus globosis, 25-45 μ . diam., partim in substrato sessilibus, partim breviter pedicellatis, non raro pluribus lateraliter fatiscentibus; baculis 2-3 μ . longis.

Hab. in Lichenibus viventibus, quos destruit, in Amer. bor. (THAXTER) et in fimo cuniculino prope Berolinum Germaniæ (QUEHL).

4. **Chondromyces serpens** Thaxt. — Syll. XI, pag. 461 (nomen). — 6087

Pallide roseus v. in atro-rubrum nutans, arescendo valde atratus, 1 mm. lat., ex baculorum sacculis intestiniformibus varie inter se contortis formatus; baculis brevibus, 2-3 μ . long.

Hab. in lichenibus corruptis in Amer. bor. (THAXTER) et in fimo cuniculino prope Berolinum Germaniæ (QUEHL).

5. **Chondromyces glomeratus** Zederb., Sitzb. k. Ak. d. Wiss. Wien, 6088

CXII Abt. I (1903) p. 477, t. II, fig. 6-20. — Acervulis sessilibus versiformibus, sæpe verticaliter oblongis, 2-5 mm. alt., confluenso pulvinato-lobulatis, e roseo purpurascens, subtremelliformibus, ex mucedinea cum bacteriacea symbiotice connexis, teste auctore, constantibus; Mucedinea (*Dendrodochii* sp.?): hyphis septatis, 1,5-3 μ . cr., conidiophora compacta ascendens gerentibus; conidiophoris pluries dichotomicè ramosis; conidiis solitariis vel breviter catenulatis, continuis, e globoso ovoideis, 7-12 μ . long., brunneolis; Bacteriacea: (*Bacillus Chondromycetis-glomerati* Zederb. l. c.); baculis oblongis utrinque rotundatis, 2 \approx 0,5-1, subinde curvulis, ciliis (?) 4-5 tortuosis exilissimis longis ornatis, materiam roseam labilem secernentibus.

Hab. in truncis fagineis locis udis aliquot, Wienerwald Austriae. — Genesis fungilli iterum inquirenda et confirmanda!

POLYANGIUM Link — Syll. VII p. 47, XIV p. 38 et 844, XVIII p. 219.

1. **Polyangium vitellinum** Link — Syll. VII, p. 47. — *Myxobacter* 6089

aureus Thaxt. — Syll. XI, p. 461 (nomen). — Baculorum cumulis ante maturitatem albis, dein in fragmenta numerosa, globosa, 100-300 μ . diam., mox membrana aurea (cystica) induta secedentibus;

cystibus his 1-8 v. pluribus coloniam 1-4 mm. latam formantibus et diutius strato subgelatinoso obductis; baculis 1,2-3 \times 0,4.

Hab. in lignis, corticibus udis jam aqua immersis in Europa et Amer. bor.

2. **Polyangium sorediatum** Thaxt., Bot. Gaz. XXXVII (1904) p. 414, 609 t. 27, f. 22-24, Quehel l. c. p. 17. — Laete aurantio-rubrum, ambitu circulari, 200-400 μ . diam., intus compactum ex cystibus minutis 6-10 μ . cr., polygonio-applanatis, membrana distincta praeditis, baculos 1 μ . long. continentibus, baculis vegetativis 3-5 \times 0,8.

Hab. in fimo cervino prope Berolinum Germaniae et in fimo cuniculino in America boreali, rarius. — Ad hoc genus quoque spectat: **Polyangium fuscum** (Schröt.) Thaxt., l. c. p. 414 = *Cy-stobacter fuscus* Schröt. — Syll. VIII, pag. 1035.

3. **Polyangium compositum** Thaxt., Bot. Gaz. XXXVII (1904) p. 413, 608 tab. 27, f. 29-30. — Flavido-aurantiacum, subinde arescendo rubrum; acervulis 100-170 μ . diam., ex 4-6 cystibus 75-100 μ . d. subrotundis, mucoso-obvolutis constantibus; cystibus in numerosissimas cystes secundarias, inaequaliter polygonias 10-15 μ . diam. divisis.

Hab. in fimo cuniculino in America boreali.

4. **Polyangium simplex** Thaxt., Bot. Gaz. XXXVII (1904) pag. 414, 608 *Myxobacter simplex* Thaxt. — Syll. XI, p. 461. — Laete rubescenti-flavum; cystibus tenuiter tunicatis, simplicibus, majusculis, inaequaliter rotundatis, 250-400 μ . diam.; baculis in copiosos minutos glomerulos, intus carneos coalescentibus, 1,2-3 \times 0,4.

Hab. in lignis et corticibus putridis udis in Amer. bor. et Germania.

5. **Polyangium primigenium** Quehl, Centralbl. f. Bakter. II Abt., XVI 6093 (1906) p. 16. — Rubido-brunneum, siccitate atro-brunneum; acervulis irregulariter rotundatis, grumosis, usque ad 1 mm. diam., discretis intus aequaliter rubentibus, e baculis brevibus, 3-4 μ . longis formatis.

Hab. sat frequens, in excrementis Cuniculi pr. Berolinum in Germania.

MYXOCOCCUS Thaxt. — Syll. XI pag. 480, XIV pag. 843, XVIII p. 318 (*).

(*) Species in Syllog. vol. XX, p. 175, lin. 1-29 perperam citatae sub gen. *Myxobacter* adscribendae sunt gen. *Myxococco*.

1. **Myxococcus rubescens** Thaxt. — Syll. XI, pag. 460 (nomen). — 6094
 Acervulis ex albido atro-rubescens, magnitudine valde ludibundis, 100-1000 μ . diam., membrana nulla distincta; baculis vegetativis 4-7 \times 0,5-0,8; sporis 1-1,2 μ ., initio resistentibus, dein aere udo sensim diffluentibus.
Hab. in lichenibus, charta, fimo, fungis putrescentibus in Amer. bor. et in Germania. — Teste Quehl, *Myxococcus ruber* Baur non satis differt.
2. **Myxococcus ruber** Baur, Arch. f. Protistenkunde V (1905) p. 91- 6095
 121. — Acervulis subrotundis, rubris, 0,25-0,50 mm. diam.; sporis perexiguus, globulosis, 0,8-1,3 μ . diam. germinando sensim in formam baculi 4-10 \times 0,5-0,7 abeuntibus.
Hab. in fimo equino, vaccino, canino etc. in Germania. — Quoad characteres biologicos ex cultura cfr. l. c. ubi de aliis Myxobacteriaceis disseritur.
3. **Myxococcus virescens** Thaxt. — Syll. XI, pag. 461 (nomen). — 6096
 Flavus v. flavo-virescens; acervulis globulosis, magnitudine valde variis, 100-1000 μ . diam.; baculis 4-7 μ . long.; sporis 1,8-2 μ . d.
Hab. in fimo cuniculino, stercore canino, vulpino, galinaceo in America boreali et prope Berolinum Germaniæ.
4. **Myxococcus coralloides** Thaxt. — Syll. XI pag. 461 (nomen). — 6097
 Acervulis dilute rubris, minutissimis, 50-200 μ ., copiosis, forma valde ludibundis; massulis coralloideis processibus numerosis, brevibus, rotundatis præditis; baculis 3-7 μ . longis; sporis 1-1,2 μ . d.
Hab. in lichenibus putrescentibus in Amer. bor. et in fimo putri in Germania.
5. **Myxococcus clavatus** Quehl, Centralbl. f. Bakter. II Abt., XVI 6098
 (1906) p. 18. — Pallide rubescens, firmus, erectus, digitiformis v. clavatus, 200-400 μ . alt., supra 150 μ . cr., basi 75 μ . cr., membrana carens; sporis circ. 1 μ . diam.; baculis 3-6 μ . longis.
Hab. in fimo cuniculino frequens, pr. Berolinum Germaniæ.
6. **Myxococcus digitatus** Quehl, l. c. p. 18. — Pallide ruber, oblon- 6099
 gus, erectus, appendicibus digitiformibus parvis auctus, firmus, 75-150 \times 25-40; sporis 1-1,2 μ . diam.; baculis 4-7 μ . longis.
Hab. in fimo ab urbe Capite Bonæ-Spei in Germaniam advecto.
7. **Myxococcus javanensis** Kruyff, Centralbl. f. Bakter. II Abt., XIX 6100
 (1908) p. 386. — Acervulis rotundis, subinde suboblongis, sessilibus, 70-100 μ . diam., læte rubris; sporis rotundis, crassiuscule tunicatis, 1,6 μ . diam., pro more 2-3 catenulato-junctis; bacteriis immobilibus, 6-7 \times 0,6, bacillaribus, in pseudoplasmodia congregatis.

Hab. in fimo ex stabulo quodam, Buitenzorg insule Java.

8. **Myxococcus incrustans** Zederbauer in Sitzungsber. k. Ak. d. Wiss. Wien, CXII, Abt. I (1903) p. 474, t. I et II, f. 1-5. — Guttuliformis, pallide roseus, gelatinosus, nitidulus, 1-2 mm. alt. confluendo strata effusa rosea formans, ex fungo hyphomycete cum bacteriaceo symbiotice connexis constans; hyphomycetes (*Torula Myxococci-incrustantis* Zederb. l. c.): hyphis repentibus 3-5 μ . cr., atro-brunneis, levibus, ramulos conidiophoros brevissimos exerentibus; conidiis catenulatis, facile secedentibus, continuis, atro-brunneis, globosis, levibus 4-8 μ . diam.; bacteriacea (*Bacterium Myxococci-incrustantis* Zederb., l. c.): baculis majusculis utrinque rotundatis, 3-4 \times 1,4-1,7, ovoideis, materiam roseam edentibus, in cultura etiam catenulatis.

Hab. in spongia communi gummi arabico imbuta ad glutinandas chartas etc. in Austria. — Genesis et biologia fungilli iterum inquirenda et confirmanda.
